

REPORT

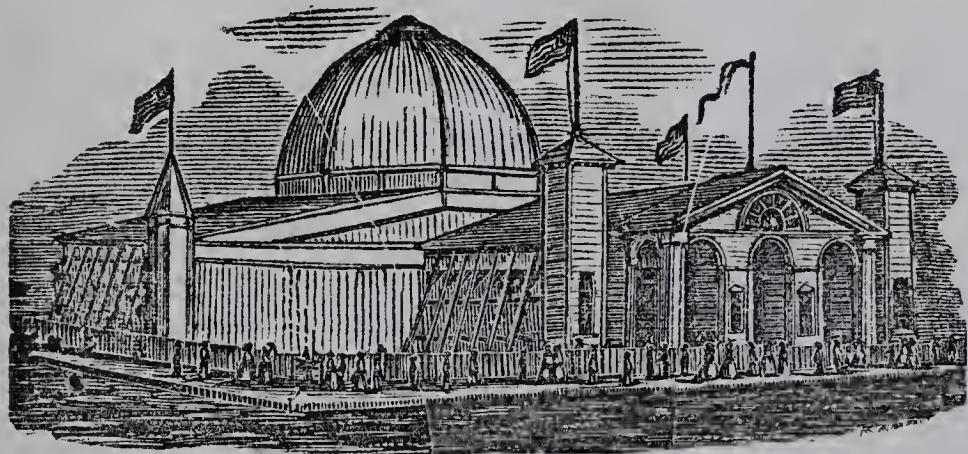
OF THE

Fifth Industrial Exhibition

OF THE

MECHANICS' INSTITUTE

OF THE CITY OF SAN FRANCISCO,



HELD AT THE PAVILION OF THE INSTITUTE,

From the 10th of August to the 9th of September,

A. D. 1865.

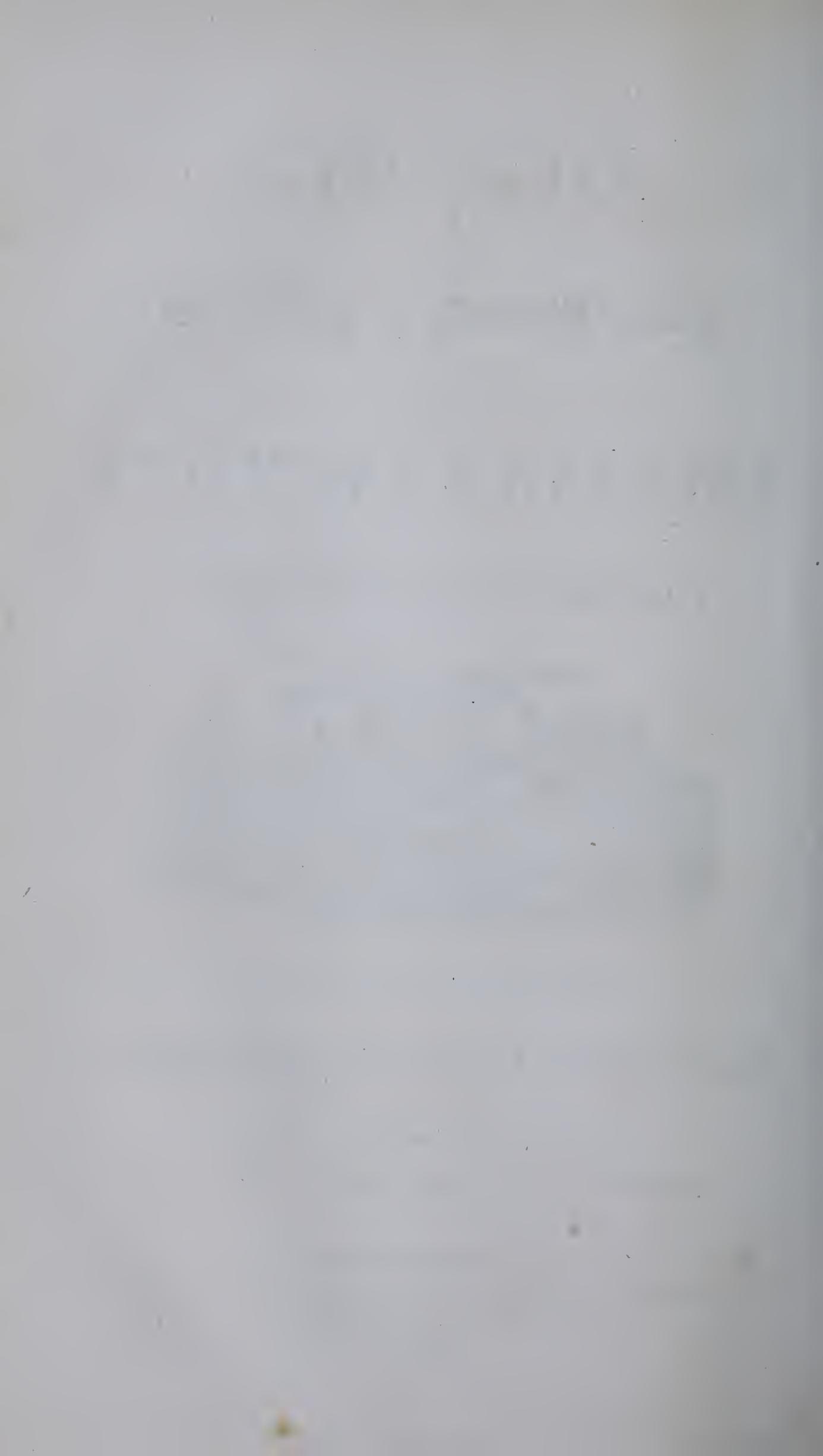


SAN FRANCISCO :

MINING AND SCIENTIFIC PRESS BOOK AND JOB PRINTING OFFICE.

No. 505 Clay Street, corner of Sansome.

1865.



The Mechanics' Institute
OF THE
CITY OF SAN FRANCISCO.

Organized March 29th, 1855.

BUILDING OF THE ASSOCIATION,
529 CALIFORNIA STREET.

Library Hours, from 8 A. M. to 10 P. M.

TERMS OF ADMISSION:

Shareholders' Membership, \$5.00. Quarterly Dues,
\$1.50. Subscribing Membership, Initiation Fee,
\$1.50. Quarterly Dues, \$1.50.

OFFICERS.

President.....	CHARLES M. PLUM
Vice President.....	JOSIAH MOULTON
Recording Secretary.....	P. B. DEXTER
Corresponding Secretary.....	C. S. HIGGINS
Treasurer.....	EDWARD NUNAN

DIRECTORS.

A. A. SNYDER,	W. W. HANSCOM,	DAVID DWYER,
H. K. CUMMINGS,	JAMES R. DEANE,	D. A. MACDONALD,
	J. W. REAY.	

MANAGERS OF THE INDUSTRIAL FAIR.

EXECUTIVE COMMITTEE.

CHARLES M. PLUM,	W. W. HANSCOM,	DAVID DWYER,
JOSIAH MOULTON,	EDWARD NUNAN,	H. K. CUMMINGS,
JAMES R. DEANE,	D. A. MACDONALD,	J. W. REAY,
A. A. SNYDER,	C. S. HIGGINS,	P. B. DEXTER.
		J. B. PIERCE, Agent.
GARDNER ELLIOTT,	General Superintendent.	

Rules for the Government of the Fair

Of the Mechanics' Institute, August, 1865.

FIRST. The name of every article should be attached to it, and such other information as regards its merits, as may be thought desirable.

SECOND. When articles are entered, a check for the same will be given, which must be surrendered when the articles are withdrawn; a non-compliance with this rule will forfeit the right to compete for reward.

THIRD. Articles intended for sale may be so labeled, but cannot be removed before the close of the exhibition; unless by consent of the executive.

FOURTH. The Committee of Judges will be appointed by the Executive Committee, who will examine and report upon the merits of the articles exhibited.

FIFTH. The morning of each day, until 9 o'clock, will be appropriated to the Judges, and visitors will not be admitted during that time.

THE COMMITTEE OF JUDGES will be governed by the following rules in examining articles:

FIRST. The Executive Committee have provided gold medals, which will be given as special premiums, to be awarded to such inventions and manufactures of the Pacific Coast as shall prove of great practical value to the mining, agricultural and manufacturing interests thereof.

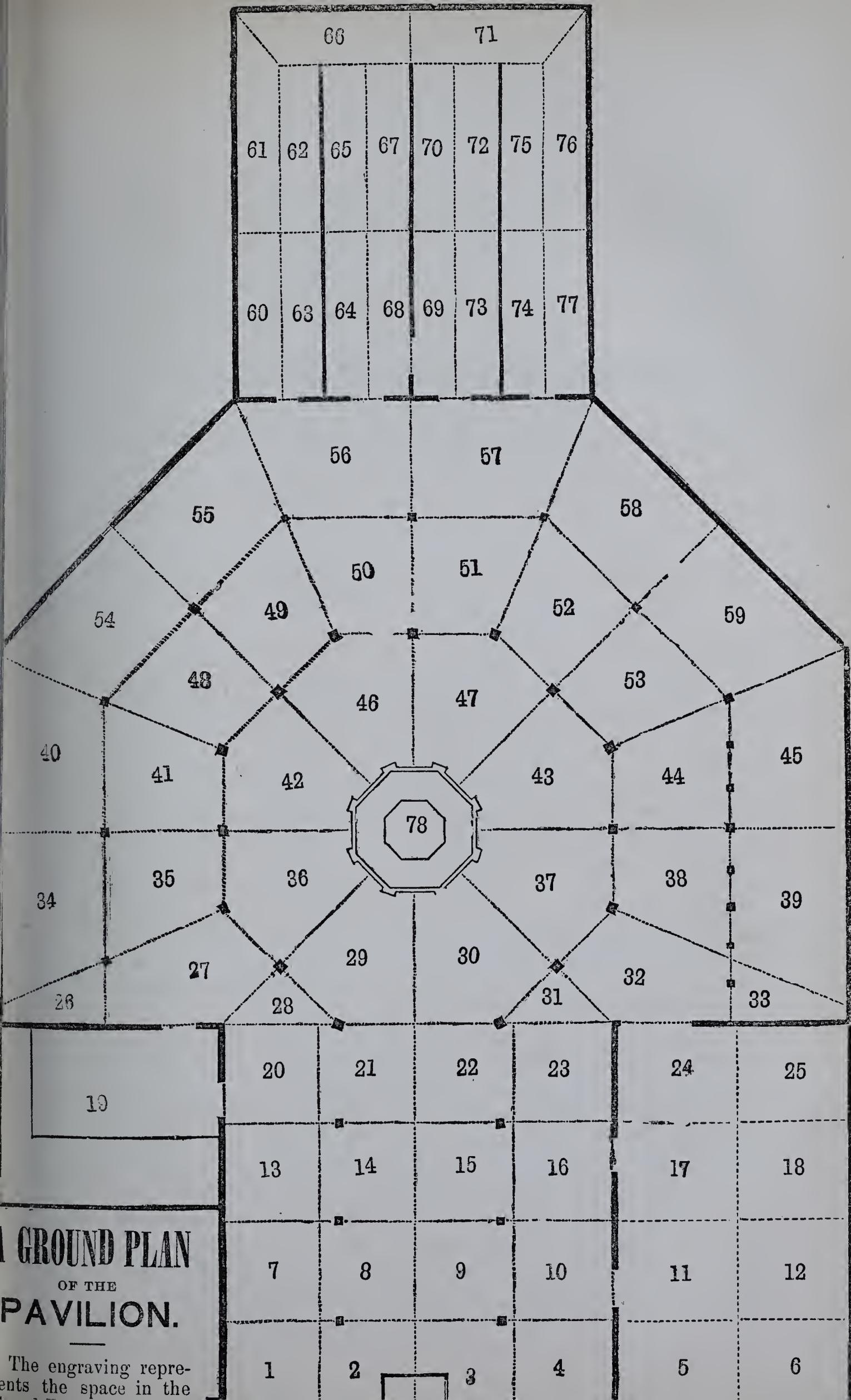
SECOND. Silver medals have been provided, which will be awarded as special premiums for domestic inventions and manufactures of superior merit.

THIRD. The Diploma will be awarded as first premium for superior skill in workmanship and finish of articles exhibited.

FOURTH. The Certificate of Merit will be awarded as second premiums to such articles as show merit.

NO PREMIUM to be awarded, unless two or more articles of a kind are exhibited for competition.

NO PREMIUMS will be awarded on articles entered after the 14th inst.



GROUND PLAN OF THE PAVILION.

The engraving represents the space in the

Report of the Executive Committee

FOR THE FIFTH INDUSTRIAL EXHIBITION OF THE MECHANICS
INSTITUTE OF THE CITY OF SAN FRANCISCO.

*To the Members of the Mechanics' Institute
of the City of San Francisco.*

GENTLEMEN:—The Executive Committee of the Fifth Industrial Exhibition of the Mechanics' Institute, in presenting their report of the details of the management, expenditures and receipts of the same, desire to congratulate you on the now prosperous condition of the Association, which presages increased usefulness in the future, and the consequent stimulating of industrial and mechanical pursuits among us until they attain a state of perfection, in all their departments, not to be excelled elsewhere. It is with no spirit of self-gratulation, or ordinary feelings of pride, that they have to announce to you that, from the success of the late Exhibition, the Institute is free from indebtedness and with funds in its treasury.

In this connection a brief retrospect of the past is proper, and may not be uninteresting to many who have not been cognizant of the difficulties and trials which the Association so long labored under, and from which it has so triumphantly emerged.

The preliminary meeting for the forming of an organization was held by the mechanics of San Francisco at the office of the Tax-Collector, on the evening of the 11th day of December, 1854, and on the 6th day of March following, the Committee appointed at the preceding meeting reported a Constitution as the result of their labors, which was adopted. With varying fortune, but generally an adverse one, the Institute continued increasing its library and usefulness, until February, 1863, when it was found that, having held three Fairs, viz., in 1857, 1858, and 1860, the Institute was steadily tending to bankruptcy. At this time urgent appeals were made through the public press for support from those engaged in mechanical and other pursuits. These appeals met with a generous response, so that, in October of the same year, the officers of the Institute were enabled to welcome the other members to the opening of the building in California Street, which at the present time is owned and occupied by the Association. A large

debt was still due on the building, mainly consisting of two mortgages: the first of \$6,000, with a number of years to pay it in; and a second for \$2,500, due on the 8th of February following. About the latter period the Institute was in high favor with the business public of San Francisco on account of its action in regard to the currency question, and its wants becoming known, the amount required to pay off the second mortgage was donated, and the same paid at maturity. At the close of 1863, it was determined by the Institute to give a course of lectures, Professors Brewer and Whitney, of the State Geological Survey, and the Rev. Thomas Starr King, kindly volunteering to deliver the same without charge. From these lectures the sum of \$1,000 was realized.

A large debt still hanging over the Institute, in the spring of 1864 it was decided to hold an Industrial Exhibition in September following, from the proceeds of which it was hoped to be able to relieve the Institute from all pecuniary embarrassment. By the kindness of the Board of Supervisors a privilege was granted to the Institute, allowing it the use of Union Square to erect the necessary buildings for the holding of the proposed Fair. Through the confidence and liberality of members, and others, sufficient funds were advanced, on the security of the receipts of the proposed Fair, to erect suitable buildings for the purpose.

The Fair of 1864 was a great financial success, the receipts more than equaling all expenditures, leaving the buildings the property of the Institute, besides clearing off considerable floating indebtedness. The Board of Supervisors kindly extending the time for occupying the square for another year, and the mortgage of \$6,000 being still due on the California Street property, besides some floating indebtedness, it was resolved by the Institute to hold another Fair in August, 1865, to liquidate the same, if possible, and the present Board of Officers were instructed to carry out the proposed plan.

The management of the Fair of 1865 entered on their duties under peculiar circumstances, the general feeling of exhibitors and the public, at the first announcement of the intention, being quite adverse to the same. The buildings of the Fair of 1864, however, having been left by the preceding Board, encouraged your Committee to persevere, while better counsels prevailed among exhibitors, so that, on the opening of the Fair on the day proposed (10th of August), a most creditable exhibition, for a first night, was made. The public appreciating the endeavors of the Executive Committee, ensured the success of the Fair, which also encouraged exhibitors, so that the display, in number, value, and variety of entries, fully equalled any of its predecessors, while in a financial point of view, the result, as above stated, liquidated all indebtedness of the Institute, both bonded and floating, and, at the date of this report, leaves a balance to the credit side of the management of the late Fair of about \$10,000.

To stimulate and encourage efforts to produce or manufacture those articles of greatest value to the people of the Pacific slope, your Committee have inaugurated the bestowing of a special medal for that purpose. This medal which has been designated the "Institute Medal," was awarded by a special

committee of our most distinguished citizens to the party or firm exhibiting that article of California manufacture in the Exhibition considered of the greatest importance to the State. Your Committee deem the award of this medal of such value in producing the effect desired, that they recommend a continuance of the practice at all future Fairs to be held by your Association.

For items of receipts and expenditures the Committee refer you to the detailed account, as per Treasurer's report annexed.

In conclusion, the Committee deem it a fitting opportunity to return the thanks of the Institute to the Press for many favors received, and to the Public at large, whose generous patronage has stimulated enterprise, and enabled the Committee to present so favorable a report.

Towards the close of the Fair your Committee donated the receipts of five consecutive nights to the following named Charitable Societies, viz., Roman Catholic Orphan Asylum, Protestant Orphan Asylum, St. Vincent de Paul Society, Ladies' Protection and Relief Society, and the Home of the Inebriate, besides giving five nights' rent and half of the receipts from the Colfax address to the Ladies' Seamans' Friend Society.

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H. F. WILLIAMS,

DAVID DWYER,
H. K. CUMMINGS,
J. W. REAY,
P. B. DEXTER.

San Francisco, 1865.

*Resigned.

Treasurer's Report.

To the Chairman and Members of the Executive Committee of the Mechanics' Institute of the City of San Francisco, for the Industrial Exhibition of 1865 :

GENTLEMEN:—I beg leave to lay before you the following Report of the Receipts and Disbursements of the Fifth Industrial Exhibition of the Institute, just brought to a close under your supervision; also, a Ticket Report, showing the number of tickets of each class sold, and the names of the persons who kindly consented to aid in selling the same. As a matter of record, I thought it proper to give, parenthetically, the receipts at the door of the Pavilion on the days given to charitable associations, each of whom realized considerable by the sale of tickets otherwise. I will also state that, in accordance with your instructions, the rent of the New England Kitchen was not collected on said days, nor for the twenty-first day of the Exhibition, which, together with \$61.55 on the afternoon of the Colfax oration, was equivalent to a donation to that institution of \$361.55.

I have the honor to be, gentlemen, your obedient servant,

EDW'D NUNAN, Treasurer.

Synopsis

Of the Receipts and Disbursements of the Industrial Exhibition of 1865, as carried out in detail in the following pages :

RECEIPTS.

To amount received as Loans to Exhibition Fund, as per account	\$ 3,400 00
" " for tickets, as per account	26,318 50
" " for privileges, as per account	2,373 05
" " for sundries, as per account	3,441 70
	<hr/>
	\$35,533 25

DISBURSEMENTS.

By cash paid Loans, as per account folio.....	\$ 3,400 00
" " Building Expense, as per account folio.....	3,309 86
" " Running Expense and Sundries, as per account folio.....	12,081 57
By amount transferred to Treasury of the Institute.....	16,741 82
	<hr/>
	\$35,533 25

Loans.

Received from (and returned to) the following persons as Loans to the Exhibition Fund:

C. Reis.....	\$250 00
Blyth & Wetherbee.....	250 00
California Steam Navigation Company.....	250 00
North Beach and Mission Railroad Company.....	300 00
Central Railroad Company.....	300 00
San Francisco and Oakland Railroad Company.....	200 00
S. M. Sargent.....	100 00
Goddard & Co.....	200 00
Thomas Day.....	200 00
William B. Cook.....	200 00
Crane & Brigham.....	200 00
R. B. Woodward.....	200 00
F. E. Weygant.....	100 00
William T. Coleman.....	200 00
Meeker, James & Co.....	150 00
Howland, Angell & King.....	200 00
Vulcan Iron Works Company.....	100 00
	<hr/>
	\$3,400 00

Over \$10,000 was subscribed to this Fund, but the above amount was all that was considered necessary to be collected. There was no difficulty whatever experienced in obtaining loans, and it is worthy of note that Wm. C. Ralston, of the Bank of California, consented to have an account opened with that Bank as early as the 1st of June, on the assumption of deposits, when realized, not limiting the amount to be drawn.

CASH DR. TO SUNDRIES.

To amount received from Mallon & Co., for Glass.....	\$ 20 00
" " " Mr. Higgins, for Zinc.....	2 00
" " " Benefits, (to pay their Current Expenses).....	525 00
" " " S. F. Insurance Co., returned Premium on Policy of Insurance.	84 00
" " " Home " " " " " " ..	54 00
" " " Fireman's Fund " " " " ..	45 00
" " " Union Insurance Co., " " " " ..	34 10
" " " Proceeds of Sale of Pavilion.....	1,761 00
" " " Proceeds of Sale of Chairs.....	125 55
" " " P. O'Brien, for Gas Pipe.....	700 00
" " " D. Dwyer, for Gas Pipe.....	4 80
" " " J. H. O'Brien, for Chandeliers.....	75 00
" " " W. W. Hansecom, for Fire Wood.....	11 25
	<hr/>
	\$3,441 70

There still remains on hand all the water pipe, valued at \$50 ; stop-cocks, valued at \$50 ; and all the gas burners and reflectors, which, in the event of another Fair, will be found very valuable.

CASH DR. TO PRIVILEGES.

To amount received for rent of New England Kitchen (received daily).....	\$1,050 00
" " from A. Whitney, Soda Fountain, 20 per cent. on gross amount....	94 65
" " W. Frink, " " " " " "	68 45
" " A. Schuman, Cigar Stand.....	65 00
" " Dewey & Co., Printing Privileges, 25 per cent. of net profits..	150 00
" " Swain & Brown, 20 per cent. on Restaurant receipts.....	629 95
" " Card Writer, six days (privilege withdrawn).....	15 00
" " J. Halstead, Cider Privilege.....	100 00
" " John Denn " " " " " "	100 00
" " E. W. Walton " " " " " "	100 00
	<hr/>
	\$2,373 05

The returns of the Restaurant are from the Receiver placed there by the Executive Committee during the Fair.

It was afterwards discovered that a much larger amount could have been realized for the Cider Privilege, had the exclusive right been sold to the highest bidder.

Ticket Account.

Showing the total number sold, and by whom, (original delivery):

	DOUBLE SEASON.	SINGLE SEASON.	BOYS' SEASON.	ADMIS- SION.	BOYS' AD- MISSION.	AMOUNT- ING TO.
E. P. Heald.....	.....	.....	13	.....	.....	\$ 19 50
J. B. Pierce.....	60	16	.....	.....	.....	348 00
William K. Benjamin.....	50	2	.....	.....	.....	256 00
P. B. Dexter.....	86	3	.....	.....	.....	439 00
D. Dwyer.....	24	4	.....	.....	.....	132 00
J. Halstead.....	2	2	.....	.....	.....	16 00
Tucker & Co.....	18	7	.....	.....	.....	111 00
A. A. Snyder.....	13	4	.....	.....	.....	77 00
Barrett & Sherwood.....	12	4	.....	.....	.....	72 00
Keith & Co.....	13	7	.....	.....	.....	86 00
A. Roman & Co.....	6	3	.....	.....	.....	39 00
Bancroft & Co.....	9	2	.....	.....	.....	51 00
Blyth & Wetherbee.....	21	9	.....	.....	.....	132 00
H. F. Williams.....	12	2	.....	.....	.....	66 00
George Sturdevant.....	5	.....	.....	.....	.....	25 00
Tyler Bros.....	3	3	.....	.....	.....	24 00
A. Kohler.....	9	5	.....	.....	.....	60 90
Chas. M. Plum.....	17	1	.....	.....	.....	88 00
Jas. R. Dean.....	11	2	.....	.....	.....	61 00
Josiah Moulton.....	22	6	.....	.....	.....	128 00
D. A. Macdonald.....	79	14	.....	.....	.....	437 00
W. W. Hanscom.....	11	8	.....	.....	.....	79 00
D. R. Coleman.....	18	2	.....	.....	.....	96 00
Spring Valley Water Co.....	20	.....	.....	.....	.....	100 00
Robert Rodgers.....	65	4	.....	.....	.....	337 00
A. S. Hallidie.....	8	.....	.....	.....	.....	40 00
J. Pierce.....	5	.....	.....	.....	.....	25 00
*E. B. Walsworth's School.....	.....	.....	.....	.....	100	20 00
Wm. Shew.....	9	.....	.....	.....	.....	45 00
Lewis Leland.....	.....	5	.....	.....	.....	15 00
Scattering, per Day-Book.....	8	1	1	8	.....	48 50
Dwyer & Macdonald.....	303	109	8	4,130	198	3,968 50
Robert Riddle (Clerk).....	1,105	374	91	23,527	1,320	18,877 00
Totals.....	2,024	599	113	27,665	1,618	\$26,240 50

* A reduction of five dollars was made on these tickets, being sold for school purposes.

RECAPITULATION OF TICKET ACCOUNT.

Double Season Tickets sold, 2,024, at \$5.....	\$10,120 00
Single Season Tickets sold, 593, at \$3.....	1,797 00
Boys' Season Tickets sold, 113, at \$1.50.....	169 50
Admission Tickets sold, 27,665, at fifty cents.....	13,832 50
Children's Admission Tickets sold, 1,618, at twenty-five cents.....	404 50
	<hr/> \$26,323 50
Discount on School Tickets.....	5 00
Total received for Admission.....	\$26,318 50

DOOR RECEIPTS

Each day during the Exhibition, commencing August 10th :

1st day.....	.....	\$ 2,310 00
2d day.....	.....	1,536 20
3d day.....	.....	1,779 50
4th day.....	.....	1,494 15
5th day.....	.....	1,224 50
6th day .....	.....	1,100 75
7th day .....	.....	929 75
8th day .....	.....	978 50
9th day .....	.....	1,556 80
10th day.....	.....	749 20
11th day.....	.....	883 00
12th day.....	.....	860 95
13th day.....	.....	716 25
14th day.....	.....	585 75
15th day.....	.....	1,154 00
16th day.....	.....	461 25
17th day.....	.....	475 50
18th day.....	.....	672 00
19th day.....	.....	619 75
20th day.....	.....	681 50
21st day.....	.....	1,199 50
22d day, (Benefit of Catholic Orphan Asylum).....	565 85	
23d day, (Benefit of Protestant Orphan Asylum).....	573 20	
24th day, (Benefit of the Ladies' Protection and Relief Society).....	291 95	
25th day, (Benefit of St. Vincent DePaul Society).....	555 95	
26th day, (Benefit of Home of Inebriate).....	436 54	
		839 40
27th day.....	.....	\$22,808 20

The foregoing daily receipts include the amount received for Season Tickets sold at the door.

Building Expense Account.

Including Tables and Woodwork Connected with Machinery :

ADDITION.....	To amount paid Pickering & Harvey for Add'n to Building	\$1,160 00
CARPENTERS.....	To amount paid William Goudy, labor.....	\$112 00
	" E. S. King, labor.....	98 00
	" M. V. Wiggins, labor.....	156 00
	" Christopher Toole, labor.....	114 00
	" L. L. Worcester, labor.....	96 00
	" J. B. Leavett, labor.....	57 00—
DRILLING.....	To amount paid Murphy, Grant & Co.....	633 00
GAS PIPE & FIXTURES.	To amount paid Thomas Day, for pipe.....	56 83
	" J. K. Prior, for pipe.....	24 96
	" J. W. Brittan, for pipe and fittings.....	30 39
	" J. H. O'Brien, for chandeliers & fixtures.	325 00
	" Johnston & Reay, mat'l's for reflect's, etc.	65 42
	" H. Maddern, gas fitter.....	306 00
	" Thomas Flarriety, helper.....	160 50
	" McGill & Co., columns for chandeliers...	54 90— 1,024 00
GLASS.....	To amount paid Mallon & Co., for glazing.....	3 00
HARDWARE	To amount paid Conroy & O'Connor, hardware.....	69 00
	" Underhill & Co., hardware.....	9 00
	" W. H. Eastman, hardware.....	13 00—
LUMBER.....	To amount paid Johnston & Co., lumber	113 00
	" Wetherbee & Co., lumber.....	116 32—
MOULDINGS.....	To amount paid McGill & Co., mouldings.....	18 70
ZINC WORK.....	To amount paid H. G. & E. S. Fisk, for zinc work.....	4 00
		—
		\$3,309 86

Sundries, and Running Expense Account.

ADVERTISING....	To amount paid Alta California.....	\$ 91 00
	" American Flag.....	70 25
	" Abend Post.....	20 00
	" Bulletin.	86 00
	" California Farmer.....	25 00
	" Californian	30 00
	" California Demokrat.....	16 00
	" California Chronik.....	6 00
	" California Rural Home Journal.....	12 50
	" Christian Advocate.....	10 00
	" Hebrew Observer.....	11 50
	" Hebrew.....	14 00
	" Golden Era.....	30 00
	" Irish News.....	10 00
	" Independent.....	5 00
	" Le National.....	15 00
	" L'Independant	15 00
	" L'Echo du Pacific.....	4 00
	" Morning Call.....	60 50
	" Nuevo Mundo.....	22 00
	" Parola.....	15 00
	" Police Gazette.....	30 00
	" Scientific Press.....	42 50
	" Santa Cruz Sentinel.....	10 75
	" Spirit of the Times.....	40 00
	" Sunday Mercury.....	23 00
	" Spectator	10 00
	" Weekly Pacific.....	12 00
	" L. P. Fisher, agent.....	240 00
	" Wm. B. Lake, agent.....	27 50
	" J. B. Thompson, in cars.....	15 00—\$ 1,019 50
ADDRESS	To amount paid H. B. Platt, for Music Hall.....	75 00
	" S. M. Blair, Decorations.....	20 00—
BILL POSTING....	To amount paid George Bradford.....	95 00
	" Way & Keyt.....	5 00
		20 00—
DAMAGE & LOSS..	To amount paid Jacob Strahl, damage to billiard table.....	25 00— 25 00
	" P. Liensenfelt, damage to billiard table..	10 00
	" E. T. Lorquin, damage to goods.....	16 12
	" A. Bergaret, for stamp lost.....	5 00
	" L. Schell, re-glazing show case.....	5 00
	" John Harding, to re place rope cut.....	25 00—
		71 12
	Carried forward.....	\$1,210 62

	Brought forward.....	\$1,210 62
DECORATIONS.....	To amount paid Elam & Howes, for two American Flags.	
	" " John C. Bell, for use of Flags	69 00
	" " Collie & Stewart, evergreens.....	20 00
	" " James O'Donnell, plants.....	80 00
	" " James Hutchinson, evergreens	8 00
	" " W. C. Walker, plants.....	60 00
	" " Paltenghi & Larseneur, use of Statuary..	50 00
		20 00— 298 00
DISCOUNT.....	To amount paid discount on U. S. currency received from	
	Government employees.....	205 11
	" " discount on silver deposited in bank at	10 50— 215 61
	the close of the Exhibition	
EMPLOYEES.....	To amount paid J. B. Pierce, Agent.....	
	" " Gardner Elliott, Superintendent.....	325 00
	" " Henry Maddern.....	360 00— 685 00
	" " James Gilkison	134 00
	" " Terrence Sullivan	139 50
	" " D. A. DeGroot	138 50
	" " Geo Getchell.....	1.1 00
	" " E. E. Jennings.....	58 50
	" " A. W. White.....	90 00
	" " J. B. Bowers.....	114 00
	" " John Lynch.....	88 50
	" " D. Barry.....	52 50
	" " H. G. Bloomer.....	81 00
	" " J. J. Collins.....	120 0
	" " Wm. Kenny.....	87 00
	" " P. B. Comins.....	57 00
	" " E. E. Coffin.....	13.0 00
	" " James Driscoll.....	109 50
	" " James Stone.....	99 00
	" " James Goldman.....	102 00
	" " Thomas Dickens.....	246 00
	" " Thomas Flarrrity.....	85 50
	" " Thomas M. Blair.....	85 00
	" " N. Hudson	135 00
	" " J. H. Culver.....	124 00
	" " Robert Riddle.....	132 00
	" " John Evatt, police officer (donated).....	247 00
	" " David Williams	59 00
		3 00— 2,824 50
GAS.....	To amount paid San Francisco Gas Company, for gas....	1,367 18
INSURANCE.....	To amount paid Home Insurance Company*.....	
	" " Home Mutual Insurance Company.....	96 20
	" " San Francisco Insurance Company*.....	17 20
	" " Union & Fireman's Fund Ins. Companies*	128 10
		160 50— 402 00
Machinery Department.		
ENGINE.....	To amount paid H. J. Booth & Co. for setting and remov-	
	ing engine, use of shafting, etc.....	207 00
	" " Palmer, Knox & Co., machinists' work..	34 50
	" " William Brodie, for couplings.....	48 88
	" " William T. Garratt, steam cocks, etc....	41 44
HAULING.....	To amount paid J. H. Hobart	10 00
	" " R. & J. Morton, removing boiler.....	40 00
BELTING.....	To amount paid Charles H. Harrison, for belting.....	34 68
	" " Mursh, Pilsbury & Co.....	128 15
ENGINEER.....	To amount paid C. F. Jones, engineer.....	165 00
FIREWOOD.....	To amount paid Forsyth and Morrison, firewood	1-2 25
	" " Audefried & Male, firewood.....	34 00
COAL.....	To amount paid Haste & Kirk, coal.....	43 31— 1,069 21
MUSIC.....	To amount paid M. W. Willis, Band.....	1,510 00
PRINTING.....	To amount paid Edward P. Fish, for printing	93 25
	" " Dewey, Waters & Co. "	18 00
	" " Calhoun & Son "	32 00
	" " Wm. P. Harrison ..	3 00
	" " Agnew & Deffebach "	26 66
	" " A. N. Rood "	26 50
	" " J. Thompson & Co. "	9 50
	" " B. F. Sterett "	20 50
	" " C. F. Robbins & Co. "	78 00— 307 41
PAINTING.....	To amount paid Hopps & Kanary, lettering.....	5 00
WHITEWASHING.....	To amount paid J. W. Whitaker, whitwash'g & paint'g	53 50— 58 50
PETTY CASH....	To amount paid J. B. Pierce, petty cash.....	160 03
	" " D. Dwyer "	23 75
	" " A. A. Snyder "	3 50
	" " Henry Maddern "	10 25
	" " D. DeGroot "	3 50
	" " H. F. Williams "	25 00
	" " W. W. Hanscom "	1 00— 227 03
	Carried forward.....	\$10,225 06

*See returned premiums in Sundries Account.

	Brought forward.....	\$10,205 06
Premiums.		
MEDALS.....	To amount paid R. B. Gray, for six gold medals.....	219 00
"	" R. B. Gray, silver medals.....	187 10
ENGRAVING.....	To amount paid E. T. J. Swasey, engraving medals.....	63 48
BOXES.....	To amount paid L. Breidenstein, medal boxes.....	7 75
"	" H. Manneck, medal boxes.....	4 00
DIPLOMAS.....	To amount paid Britton & Co., for altering, printing and lettering diplomas.....	163 50
"	" Nahl Bros., certificate of merit.....	50 00
"	" Nahl Bros., ink drawing	4 00—
PAPER	To amount paid Reed & Co., for paper, etc.....	69 10
"	" S. P. Taylor & Co., for paper.....	3 00—
PAPERHANGINGS.	To amount paid G. W. Clark, for paperhangings.....	72 10
REFRESHMENTS..	To amount paid Swain & Brown, refreshments.....	15 00
"	" F. C. Belden,	170 00
"	" H. M. Lund.....	163 00
STATIONERY.....	To amount paid Jos. A. Carrie, stationery.....	10 00—
"	" Blank book, etc., for Treasurer.....	343 00
STAMPS.....	To amount paid for check stamps, U. S. currency.....	11 62
SAFE.....	To amount paid Russell & Irwin Manufacturing Co., cartage and repairs to safe.....	2 50
SASH.....	To amount paid B. & J. S. Doe, loan of sash for Show case	2 00
SOAP.....	To amount paid Standard Soap Co., for soap used by washing machine.....	15 00
SUNDRIES.....	To amount paid C. M. Plum, for sundries.....	9 50
"	" J. L. Derby, for use of settees in picture galleries.....	7 00
"	" Weller & Jacobie, for muslin.....	7 06
"	" P. F. Loughran, for matting.....	30 00
"	" Underhill & Co., for use of furniture....	5 25
"	" Armes & Dallam, for brooms.....	39 00
"	" Stanyan & Co., removing rubbish.....	10 00
"	" Goodwin & Co., for mattress.....	6 50
"	" S. Johnson, night work.....	7 50
"	" E. Spear, to cartage on shields.....	3 00
"	" R. A. Swain, for use of cookery.....	10 00
"	" H. T. Graves, for wire cloth.....	2 00
REPORTS.....	To amount paid H. D. Dunn, for compiling and preparing reports.....	12 50
"	" A. Snow, for assistance in preparing awards for publication.....	1 00
REMOV'G GAS PIPE.	To amount paid H. Maddern, labor, removing gas pipe..	250 00
"	" Thos. Flarrrity " "	25 00—
"	" J. J. Collins " "	275 00
"	" E. E. Coffin, " "	21 00
"	" R. & J. Morton, hauling gas pipe, chairs, etc., from Pavilion.....	26 50
WATER.....	To amount paid Spring Valley Water Co., for water.....	19 15
		6 00—
		72 65
		18 50
		200 00
		\$12,081 57

All of which is respectfully submitted,

EDWARD NUNAN, Treasurer.

OPENING ADDRESS

**Delivered by the Hon. Frank M. Pixley before the
Mechanics' Institute, at Platt's Hall, San
Francisco, August 9th, 1865.**

Thomas Carlyle, a distinguished English writer, has asked, with the illiberality which characterizes some Englishmen: What great human soul, what great thought, what great, noble thing, that one could worship or loyally admire, has yet been produced in America?

May we not answer him this: We have elevated labor and made it honorable. We have established a Commonwealth on a broad and durable base, recognizing the dignity of labor. We have builded a government for the people, laying its foundations deep and broad in recognition of the great truth "that all men are born equal;" and we have carried up the superstructure, preserving in all its grand proportions the symmetrical beauty of the idea, that not birth, but merit, intelligence, and virtue are the essentials of true manhood. May we not answer this English writer that we have provided the means of education for all our youth, that we give all the honors and offices of our nation to those who strive for them? That we give the right of the elective franchise to all our race, making every one a sovereign, clothing him with all the power, dignity, and responsibility of a citizen?

If, to-night, I was reading an address to the mechanics of England, to what proportion could I direct my reflections upon political questions? How many of them might consider themselves interested in the discussion of the great topics of national importance, which are so appropriate for you to understand? How many of them would have any other interest than in the question of beef and beer?

In the kingdom of Great Britain there are five millions of white men, of lawful age, deprived of the elective franchise, who can take no part and have no voice in the administration of the government under which they live. In Ireland, only one in eighty have the right to vote.

When we are asked, What great human soul have we produced? may we not point with pride to the birth, and life, and death of him who led our armies of workmen throughout the war of our rebellion against England to victory? who became the first of the great Republic which his sword had carved out; who, ripe in years and full of honors, claimed, as his only reward for a life of patriotism,

the indulgence to retire from the service of his country. May we not claim a great human soul in George Washington, the Father of the Republic?

When asked, What great thought have we developed? Have we not demonstrated the sublime idea that men are capable of self-government? and, looking back through all the bright pages of English story, back through all their centuries of time, back to the twilight of their early civilization, do we find any great thought comparable to this?

When asked, What great, noble thing one could worship or loyally admire has yet been produced in America? may we not answer, we have produced the grandest commonwealth of freemen that the world has ever seen. We have established a government by the sacrifice of our sires, preserved by the blood of their sons, for the refuge of the oppressed of all the world. We have carved out a system of laws which affords protection alike to all. We have laid firm, and broad, and deep the foundations of our Temple of Liberty in the education and intelligence of the masses. We have builded an altar to the ever-living God, before which all creeds, and forms, and faiths may kneel in fearless freedom. Discarding all privilege to class, all title to nobility, all preference to the eldest born, we have placed our soil, our social honors, our political ambitions within the reach of all. And more than all this, we have dignified labor, and given to it the letters patent of true nobility.

May we not claim something more in the lessons taught by the stern and terrible trial through which our people have passed in the four years of war that has desolated our beautiful country?

England has produced her heroes on land and sea. Collingwood and Nelson have proudly fought their fleets to victory. Marlborough and Wellington have waded through fields of blood to glory. But, in all their galaxy of heroes, have they any brighter constellation of glorious names than Porter, Farragut, Sheridan, Sherman, and Ulysses Grant?

We may not be ashamed to compare with their grandest naval victories of the Nile and Trafalgar our exploits at New Orleans and Port Royal; their sternest fights, their grandest armies, their Agincourt and Waterloo, with the terrible encounters of our gallant boys in blue, our noble array of strong armed men, whose many battle fields bewilder us in the recital of their names.

Has not this war demonstrated the strength of Republican Government? that the ideas and theories of a free commonwealth can be protected on the battle-field by the free men who compose it? that it is not only strong in peace and prosperous when under the sunshine of repose, but strong in war and terrible when assailed, or its existence menaced by civil war?

The sublimest lesson taught in this conflict, and the one which most strikingly illustrates the ability of our people for self-government, was in the moderation and calmness with which we received the last saddest and most terrible blow in this sad and terrible drama—the assassination of our Chief Magistrate—our loved and honored President—he who had so safely piloted us through this dark and fearful night of civil war, our noble chieftain, whose great loving heart was capacious enough to have embraced all within its kindly sympathy. He was foully murdered, and yet the people obeyed the law; order, not chaos, followed; sorrow, not anger, ruled the nations' heart; judgment, not revenge, controlled the peoples' act; and there was seen the grand and simple operation of our Constitutional Government. "The President is dead—long live the President!" One lay dead in his bloody vestments; the other, placing his hand upon the Word of God, with simple oath

becomes commander-in chief of the grandest army in the world, first magistrate of thirty millions of people.

Have we not indeed made labor honorable, and given to it a just recognition, when the poor farmers' boy, the village attorney, the President of the United States dies, and is followed in his high office by a self-educated mechanic.

There is a great fitness in a mechanic being President of the Republic at this time. The war through which we have passed has shown that we live in an age of mechanics. We may not call ours the age of bronze, or iron, or gold. We may rather name it from the artificers in metal than from any of the metals themselves. In no other era of the world's history has the mechanical art been brought to such perfection, and no event could have illustrated the advancement of the mechanical sciences as has the giant struggle in which we have so recently engaged.

Let us for one moment consider the fearful enginery of war, as compared with the olden time. When a castle's walls of solid masonry was guarded by ditch, and moat, and drawbridge, impregnable to the attack of battering ram or faggot, its ramparts armed with stout men-at-arms, a siege was but a question of vigilance against surprise, water and food for long investiture. The lance, the bow, the bill, and sling of the olden time were innocent implements of war. After the invention of gunpowder, the blundering arquebuse, the unwieldy culverin, were but little effectual in the art of death. Knights and horses, armed in coat of mail and plate of glittering steel, went forth with sword and lance to deeds of single combat; then the strong arm, the cool courage, and the stout heart told in acts of personal valor. How different a field of battle now, with its cunning strategy, its terrible implements of death, its fearful machinery of war. No coat of linked mail to guard the manly breast, no stout shield of brass or hide to cover the warrior's front, no trick of the wrist or art of defence may shun the deadly bullet from the unerring rifle, no personal valor or prudence may guard against the crashing cannon ball that ploughs its furrow of death through unresisting ranks. Now, the mad maelstrom of battle is the swift clashing of material force, to be determined by the quality and effectiveness of the implements of destruction. Victory rests with the minnie rifle against the flint musket, with revolving barrels and repeating shot against the single bullet, and with the grooved chamber against the smooth bore, the unfailing percussion cap, the self-adjusting cock, the breach-loading gun, against the older and less successful experiments in arms. In the heavy ordnance, war becomes but a contest in mechanics. Bursting shell, with their nice adjustment of fuse, the elevation scientifically calculated for distance, and taken by telescopic observation; red-hot shot from heated ovens, loaded to the cannon's mouth with the lever and the inclined plane; the light artillery, that on its mission of death flies across the ensanguined field, a failure if a linch-pin fails; rifle cannon, so nicely poised, so exactly adjusted as to elevate or depress at the fingers' touch upon the screw, and then hurling their three hundred pounds of solid steel against ship, or fort, or bastion. Ships, iron plated, clad in chains and armor, with revolving turrets, hurling their fire against the enemy, and guarding from assault those within the protection of their massive shields.

I fancy that even Thomas Carlyle would have admitted that, if this last invention of the American mechanic was not a noble thing for him to worship or loyally admire, he would, at least, have looked upon it with some degree of respect, and when he thought of the boasted wooden walls of England, he might have trembled for them in prospect of any warlike encounter with the American monitors.

This war has demonstrated that all the Americans are a mechanical as well as a

warlike people. It was a popular idea that all the inventive faculty lay within the limits of New England, and all the manufacturing genius belonged to the Northern States—that our Southern brethren possessed the accomplishments and gallantry of the cavalier, but none of the genius to create or discover. But, under the stern necessity of their position, we find all kinds of war material, and all the necessary requirements to maintain their armies and supply their people springing up under their hands. Their foundries, powder mills, and ship yards turned out guns, ammunition, and gun boats of most formidable character, and though now in the day of peace we may hope to see this people return to the arts of agriculture, the lesson may not be without importance in teaching them the capacity of their people, and the resources of their land.

It has ever seemed to me that the truest measure of a nation's prosperity and greatness was the character of her mechanics, simply because a nation whose mechanics excel in all the departments of their various pursuits is independent and self-reliant. The mechanical art gives permanence to every other branch of industry.

Of the European governments of modern time, England has attained the highest point in civilization, in moral and material progress. Her mechanics build the fleets which bear the products of her looms and forges, the handicraft of her skillful workmen, to all parts of the world, bringing in return the raw material which goes forth in exchange for everything which can enrich and exalt her realm. Thus, from her little island in the sea, has she carried her conquest, her commerce, her arts, her literature, and her laws to all parts of the world.

Let us now consider some of the practical questions which touch the material interests of our coast and our people.

Adam Smith has put forth the axiom, "that labor is wealth." Labor is the source of wealth. Every laborer who comes here bringing his muscle, his industry, and his skill, brings capital to be added to the wealth of the State. This laborer should find employment, for every man willing to work, if left unemployed, to that extent paralyzes and retards the advancement of the State.

Our continued effort should be to encourage the immigration of working men and women, and check by every means in our power the importation of any article that we can ourselves produce. Every dollar that we send abroad for articles which could be produced or manufactured here, is a dollar worse than wasted.

This State can never become truly prosperous until we can manufacture for ourselves, and if one half the money which has been wasted in gambling ventures in search of the hidden treasure of our mines had been expended in the legitimate business of manufacturing, we should have saved hundreds of millions of dollars to the aggregate wealth of the country. Half the money which has been ventured in search of silver in Washoe, that has been wasted in bribes to pervert justice, in fees for the subornation of jurors and witnesses, that has gone to swindling corporations, to profligate mining secretaries and criminal treasurers, that has been paid for bungling science and pretentious experts, would have made every water-course in our State vocal with the music of the clacking wheel, as in merry industry it toiled—would have builded shops and factories in every county, giving employment to labor and wealth to the country. Half the money risked and lost by our people in their wild excitement for new diggings, from the time of Gold Bluff to the last expedition in search of lost treasure on Cocos Island, would have given us railroads through every valley of our State. Half the money risked and lost by our merchants in

desperate commercial ventures would have builded ships to carry our commerce to every sea.

I speak now of gambling and speculative projects, not intending to discourage those legitimate enterprises which are calculated to develop the mineral resources of our State, or open new avenues to wealth, for upon the prosperity of our mines in a great degree depends the prosperity of all other business ; and it is a matter of congratulation that, while the gold products of our placers are diminishing, the skill of our mechanics is perfecting appliances which enable us to increase our gold products from our quartz and gravel mines. The report of the patent office discloses this fact : The inventions and improvements in mining processes and machinery which have been made in California, and have grown out of our mining operations, are more numerous and perfect than all the previous inventions of a similar character in the world ; that during the last ten years California has taken out more patents than any other State in the American Union, and especially in pumps, quartz machinery, and chemical processes for extracting metals from ores, have our people been successful. We are discovering silver, coal, copper, quicksilver, borax, iron, marble, and other valuable minerals in such quantities and character of deposit as ensures the prosperity of mining interests for long years to come ; and, while we have not made as rapid advancement as would be desirable in manufacturing, we have been by no means idle.

I would have been glad to have gathered some statistical information touching these interests of our State, for I believe the figures would do us great credit, but the time afforded for this address was too limited for the attempt.

We are now manufacturing blankets and coarse woolen cloths, powder, paper, glass-ware, shot, matches, brooms, tubs, pails, cabinet work, jewelry, soap, starch, maccaroni, bricks, marble and granite work, fire-hose, carpets, leather, glue, oil. We are building ships, steamers, steam engines, boilers, railroad cars, carriages, wagons, producing machinery for quartz crushing, mill work, and castings of every description, and agricultural implements. Our grains are floured in our own mills, or distilled ; casks, barrels, rosin, and lumber from our forests ; cider and vinegar from our own orchards ; pickles and can fruit of our own raising ; beef and pork packed for our own consumption and export ; wine and brandy from our own vine-yards. A cotton factory is in process of construction, which, if successful will encourage the cultivation of cotton upon the Pacific coast, and will be worth to our State half a dozen silver mines. We are raising some cotton now, we are producing tobacco and manufacturing large quantities of cigars, we are producing more whisky than it is good for our people to drink, our wine product is in the millions of gallons already, though the vine culture is but in its infancy ; we are packing raisins and figs with success. There are doubtless many other sources of home wealth that I have overlooked, and I have named only a portion of our manufacturing and producing occupations. But even this glance will enable us to contrast the present with the time when we used to wonder if our mountain land would grow vegetables, when our onions and potatoes came from the Sandwich Islands, our soiled linen washed in China, our eggs and butter brought from Boston, our lumber from Australia, and our bricks from New York. This glance at our productions teaches us also how many other articles we ought to produce and manufacture, and which we will doubtless accomplish in the good time coming, when labor is plenty and money is cheap.

The question of currency is now claiming the attention of our people. Let us briefly consider it. It is one of those questions in which we have all a common

interest—we all desire the same result. We want cheap money and plenty of it. A thousand schemes of industry would be entered upon if money could be obtained at low rates of interest, and for want of which our State is now languishing. Gold and silver is our only circulating medium. Whether wisely or not, the Constitution of California prevented the establishment of banks for the issue of paper money, and for twelve years we operated with only gold and silver coin.

The war came, and the Government found it necessary to issue paper currency, and to declare that it should be a legal tender for the payment of all debts. The people of the Eastern States had been in the use of paper money, and they found the transition from the use of one kind of paper to the other easy. The substitution of the bills of national banks for the bills of private banks was not difficult. Nearly all the war expenditure was in the Eastern States, and thus the people of those States became familiar with the national currency. The substitution of paper money for coin was found more difficult on this coast. We were far removed from the scene of war and war money; our capital was largely owned by foreigners, our home indebtedness had been created for gold. We were in danger of a financial crisis. The holders of capital began to draw in their money, to deny further accommodations, unless they could have a guarantee that if they loaned gold they should be paid in gold. If the merchant sold for a gold price, and the mechanic manufactured for a gold value, and the laborer worked for gold wages, these moral obligations should be legally enforced by payment in gold. Our Legislature, wisely, I thought at the time, passed what is known as the specific contract law, but which is simply an amendment to the practice act, providing that when contracts are made for the payment of gold, or silver, or paper, the Courts shall enforce the obligation in the specific currency in which the contract is made. In other words, it extended the machinery of the law and the powers of the Courts to carry out the contracts which business men entered into with each other.

The repeal of this law is now being agitated. It is hard to convince the working man that a paper dollar, at 25 $\frac{1}{2}$ cent. below par, is equal in value to a gold dollar. But two paper dollars, worth seventy-five cents each, are worth just fifty cents more than the brightest gold dollar that ever left the mint. We need all the money that we can get, still we must not confound cause and effect. It is said that the specific contract law prevents paper money from coming to California—prevents the establishment of national banks; that nearly a thousand million of dollars of national currency are floating in the Eastern States, seeking investment at low rates of interest, and that the repeal of that law would encourage the introduction of that capital to our State, would aid to develop our resources, encourage our manufacturing interests, build up internal improvements. Now we would all of us be glad to have more capital, and I do not believe there are any of us who are so prejudiced against paper money that we would not be glad to have our pockets full of it. We would be glad to see national banks established in rivalry with our own banks for the reduction of rates of interest. We are all in favor of cheap money, and we are all patriotic enough to believe our government is able and willing to pay her entire debt, gigantic though it be.

But is it not well to enquire whether the repeal of the specific contract law will bring about all the improvements and benefits we desire? Whether its repeal will ward off all the evils we deplore, and all we anticipate?

It is a delicate matter to legislate upon questions of currency. Money is sensitive, timid, and easily disturbed, and unless we are very certain that the repeal of the specific contract clause will improve our financial condition and alleviate the

monetary embarrassment, we had better leave the law undisturbed. Capital is the nursing mother of labor, and any legislation that disturbs the one destroys the other.

There is another question claiming public attention, touching the interests of labor. I refer to the position of the freedmen of the nation.

Our war has happily terminated in the enfranchisement of 4,000,000 of people who were formerly slaves. Upon their labor depended the production of certain leading staples; they were the working force of a large section of our Union. Whether this labor force shall be retained in the spot of their former employment, or invade the fields of industry now occupied by white laborers of the North, involves the prosperity of both parts of our country.

I shall not discuss the question of slavery. It has had its day, it has performed its mission, and slavery no longer exists in the land. But we have a duty to perform toward the emancipated blacks, from which we must not shrink or turn back. They must not be imposed upon by their former masters, and, in turn, they must not be permitted to impose upon their masters. Idleness and vagrancy must be prevented, ignorance removed, industry enforced, and justice between master and servant firmly administered.

The African was born on Southern soil, and, however hard may have been his lot, he is attached to that soil. To him the plantation is home, and the South is his native land. It is his natural right to live where he was born, to die on the soil which gave him birth, and on which long generations of their ancestors have toiled, is their legitimate heritage.

It is a remarkable fact that during this long and bloody civil war, the issue of which involved the freedom of the slave, there was no slave insurrection, not an organized strike for liberty. Whether the negro was content with his lot, whether he was brutalized with long generations of servitude, whether he was ignorant of the great principles at issue, or whether he reposed upon the conviction that his deliverance was in the hands of a higher and mightier authority, we know not. The fact is, nevertheless, a remarkable one, that within the sounding roar of artillery that thundered forth to him the hope of freedom, he was content for four years to do his master's work; not from fear, because when on the battle field he exhibited a courage equal to the noblest race; not from ignorance, for wherever the armies went there had gone before them the information of the war; not because the blacks lacked fidelity to the hope of their emancipation, for the loyal fugitive could always depend upon the aid of the slave to guide, and feed, and protect him.

I can account for this fact in no other way than this: the African loves the spot of his birth, he is timid and not self-reliant, he loves his home, he is held by the memories of childhood's days, he is attached to his domestic hearth, he will not willingly sever the ties that bind him to home, and wife, and child, and master, for the uncertain experiment of freedom in a strange part.

This element of the negro character will, in my opinion, enter into and make easy the establishment of new relations between the master and the slave; mutual interest will control, and I look forward to the speedy coming time when, in all the Southern States, the master shall become a paying employer, the negro a willing laborer, with contentment and prosperity to both.

Let the negro fill the position which God has given him; let him be protected in his freedom, in his domestic ties; let him be compensated for his labor; let him be educated to the extent of his capacity; let him be protected in his life and property; let him have freedom of religious worship, and let him be content.

Either his race or mine is the superior. I think mine is; but, whether it is or not, because it is mine I would have it retain all the political power. I would not, at present, invest the negro with the privilege of the elective franchise; I would not at once qualify him as a juror, or enable him to hold office, or in any way seek to establish with him relations of social equality.

From centuries of darkness he emerges to the light of a brilliant day, and at a fearful cost to our country. After centuries of ignorance and slavery, though not his fault, he must serve some time a pupilage to intelligence and freedom; when, in later years, he shall have demonstrated his capacity for the responsible enjoyment of the elective privilege, it will then be time enough to consider it. I would rather limit the elective privilege, by taking it away from the ignorant, the vicious, and the disloyal of my own race, than by indiscriminate extension to the African and Mongolian.

In reference to the Chinese: It must be admitted that there are some present and immediate benefits attending the presence among us of the industrious working male. They work exhausted placers, content with smaller gains than the white laborer, and it is undoubtedly desirable to extract this gold and give it circulation, although but even a small percentage enures to the benefit of the country, rather than to leave it buried in our hills. The Chinese do much of the menial work, and are employed in certain classes of manufacturing with profit, doing that lighter work which in Europe is performed by women and children, and thus, perhaps, enabling manufacturers to employ white laborers in greater number, by reason of their profits from the Asiatic. But, in my opinion, the evils to be anticipated from Chinese immigration outweigh all the benefits, and that it is not wise or prudent to advance our material interests at expense to the moral welfare of our people. While, therefore, I am prepared to concede the desirableness of certain classes of the Chinese, their merchants, industrious laborers, and concede that they are inoffensive and law-abiding, I must not omit this opportunity to denounce, as hurtful and destructive the immigration of their women, their paupers, their gamblers and opium eaters, whose presence in our towns and villages is most demoralizing, and whose existence in the very heart of the city of San Francisco is an offensive sight.

Our Supreme Court, in the case of *Sin Sing against Washburn*, has determined that the Act of 1862, "AN ACT TO PROTECT FREE WHITE LABOR AGAINST COMPETITION WITH CHINESE COOLIE LABOR, AND DISCOURAGE THE IMMIGRATION OF THE CHINESE INTO THE STATE OF CALIFORNIA," was in violation of the Constitution of the United States, which gives Congress the power to regulate commerce with foreign nations, Judge Field dissenting.

The Court undertook to find an analogy between this case and a law of New York and Massachusetts, which put a tax upon alien passengers arriving in the ports of New York and Boston. In the argument of that case it was my duty, as attorney for the State, to endeavor to sustain the law. One or two extracts from the brief filed at that time express my unchanged opinion upon the propriety of inviting to our shores a race with whom we can never assimilate. In commenting upon the passenger laws, I said:

"New York and Boston, the two great emporiums of American trade, the two great entrepôts of foreign commerce, sought to impose, for the benefit of their respective localities (already grown rich and prosperous from this trade), a tax upon alien passengers. These aliens were the sturdy, industrious immigrants of Christian Europe, they had during half a century and more built up the great empire of the American Union, they were then contributing to the development and settlement of the West; before their sturdy march, forests disappeared, the Indian retired, and civilized States sprang up in their path.

"To secure this immigration had been the chosen policy of the Government. Laws of naturalization were made for its encouragement. Immigration societies sent its apostles to preach the inducements of American residence throughout Europe. Great political parties vied with each other in this bid for immigration, and then bid for proselytes to their political faith. It was not, therefore, strange that when two cities on the sea coast sought to make their ports the golden gates through which this current of passengers should pay tribute, that every sentiment of fairness should array itself against this selfish extortion ; that this sentiment penetrated within the sacred precincts of the Courts, and that even Judges of the Supreme Court, always somewhat inclined to enhance their own dignity of position by taking power to the tribunal over which they presided, caught this opportunity of taking power from the States and conferring it upon the United States.

"But how would it have been if, instead of the two cases from Boston and New York, where by State laws they sought to exact a tribute from the poor European immigrant, whom the whole nation was coaxing to its shores, there had been presented the ease of the People of the State of California against Downer, in 7 California Reports, where the people of the State of California had, for the purpose of discouraging Chinese immigration, imposed a tax of \$50 upon their landing, and the argument had gone to them in this wise : The State of California had been conquered from Mexico by the blood of our citizens, had been settled by the enterprise of the young men of the American people ; here they had brought their families and made their homes, here they had discovered inexhaustible resources of mineral wealth, gold, silver, copper, quicksilver, and coal. Geographically, we are on the very western verge of the continent, and this brings us in vicinage with Asia and its redundant millions of inhabitants, who possess all the vices, follies, and diseases incident to redundancy of population.

"An avaricious people, they have been induced, by greed of gold, to break down their barriers of prejudice, and withdrawing themselves from the isolation of centuries, they have over-leaped the great wall of Chinese exclusiveness, and are, like the lice and frogs of Egypt, overrunning our people ; they inundate our shores, and hasten to our mines to rob us of the gold which is the inheritance of our miners ; they bring their own supplies, that they may not enrich our merchants ; they bring no wives or virtuous women to our land ; they speak not our language and seek not to acquire it ; they do not attend our schools, and bring none of their youth, who might in time assimilate with our people ; they are of different race, lineage, and tongue, and cannot mingle with us ; they believe not in the Christian religion, worship not the Christian God, but bring with them the graven images of their idolatry, and avoiding our Christian churches, build their heathen temples and practice their barbarous rites in our midst. By the laws of China, virtuous women are forbidden to immigrate, and in their place comes the most vile and abandoned from their sea ports, with dreadful diseases which defy the skill of surgery and the art of medicine ; in the midst of our streets, in the presence of our wives and daughters, they practise with shameless impudence their brazen arts of harlotry. Accompanying them is the gambler, the opium eater, the debauchee, who live with and upon these abandoned women, and make night hideous with the insane ravings of their intoxicated madness and the howlings of their strange excitement.

"As an offset to this demoralization, they come in our ships, as they have none of their own ; they buy boots, which they have not the ingenuity to make ; they consume some brandy of the most poisonous kind ; they ride in our stage coaches from one mine to another, as they deplete and exhaust our placers ; they import and sell goods, and trade with each other, to the injury of our merchants ; they bring not here any part of the useful industry of their own country ; they import their rice, but make no effort to produce it from our tule lands, useless for other cultivation ; they import their sugar, nor seek to add to California's productions by attempting to raise it here. In a word, they are a nuisance in society, are useless to the commerce of the State, are a curse in the community, and are only endured by a patient people because there is a sort of an intangible, vague belief that to drive them out would be in contravention of some treaty between the Empire of China and the Government of the United States, or would come in conflict with some clause of the Constitution of the United States.

"It seems very strange that, as a sovereign State, we have not the right to abate this evil and put an end to it. We have the right, by the enactment of quarantine laws, to prevent the introduction of disease and contagion among us, yet we have not the right to prevent persons from coming to the State tainted with infectious

diseases ; laws may be passed to prevent the spread of pestilence, and yet we must, in order to encourage commerce and that we may not interfere with any laws of Congress for its regulation, suffer our State to be inundated with this moral contagion.

" We may pass laws preventing the introduction of licentious books, immoral paintings, articles of gaming, tainted food, dangerous preparations of gunpowder, and all nuisances, and yet we may not be permitted, in the exercise of the same power, to exclude a class of humanity who are licentious, immoral, gambling, and dangerous.

" We may, by State laws, throw overboard from any foreign ship such goods as are hurtful to our health or destructive to our morals, and yet a ship comes into our harbor loaded down with Chinese prostitutes, reeking with filth, stinking with strange odors, rotting with strange diseases, and they must be admitted as a part and parcel of our community. We must mix and mingle with them, eat from the same markets, traverse the same streets, and breathe the same atmosphere.

" I do not concede that by it the Chinese are not equally and fairly taxed, that in the compact between the State and themselves they are not fairly treated and honorably dealt with. The State says to the citizens of the Empire of China, we know your exclusive laws, we know your peculiar vices, your contagious diseases ; you wish to come to our country, dig our gold, and temporarily to remain here till you can accumulate enough to make you independent on your return. You will not bring your families, you will not seek homesteads among us, you will not even bring your virtuous women to the State. You will bring your prostitutes to minister to our lusts, and scatter disease and death among our dissolute and depraved ; you will not acquire property that we may tax, you can not become citizens ; we will exact from you neither jury duty nor require you to perform military service. You may not organize yourselves into fire companies, nor shall any public service be required of you. We will send our ships for you and bring you here at a low price of passage. We will settle your disputes in our Courts, we will protect your trade by our laws, we will guard you by our police, we will maintain your sick in our hospitals, we will guard your criminals in our prisons and our jails ; you shall go to our mines and dig our gold and take it home with you to China, without stamp on your bills of lading or tax on your exports ; worship Josh after the dictates of your own stomachs, and in your pagan mummeries none shall molest or make you afraid. You shall feed your dead on pork, and your living on fish caught from our waters, and on rice of your own importation—and for all this you shall contribute to the support of our various governments, municipal, county and State, and if you are not content to do this you may leave the country."

Perhaps a broader humanity than mine would welcome to our land and to the equality of our laws all the tawny races of the world, and while I hope that my liberality is not bounded or circumscribed by sympathy for my own race and color alone, I would still in my selfish love for the Saxon family save America for the Saxon rule. I would say to the descendants of Attila, Jenghis Kahn, and Tamerlane, to the worshippers of Josh and the disciples of Confucius, stay in your own rich and populous empire ; we want none of you. Asia is yours—keep it. Let your people imitate the valor of their ancestry ; let them perform their deeds of heroism in flinging stink pots amid the clanging gongs of their own civil wars ; let them pursue the craft of their cunning toil, carve their quaint images for toys, and from ivory whittle their ingenious puzzles ; raise their tea and rice. We will trade with you, and in exchange of commodities be ever civil. Your merchants may do business in our ports, and ours shall live in yours. We will maintain with you the faith of commercial treaties, but our soil shall never become the refuge of your redundant population.

The Anglo Saxon race will carve out its own destiny in its way ; will make its own laws, mould its own character on the continent where Providence has placed it.

I would enact laws to prevent their women and their gamblers from coming to our shores ; and if for a time we permitted their industrious laborers to find a home upon our shores, it should only be because they are useful to us. With my

consent none of the race should be born upon our soil. Thus, if their numbers ever became embarrassing, we could legislate against them, and the evil would die with the generation.

The length of my manuscript admonishes me that I must not too far tax the patience of the institution that has so honored me this evening. I have only been able to glance at topics of interest, in every one of which there is material for profitable reflection.

For the purpose of making California truly great and truly prosperous, to contribute toward the building up of a State upon this coast that should become the admiration and envy of all, and for the purpose of making the industrial interests to be known and appreciated, for the purpose of aiding in these great works was established the Mechanics' Institute of San Francisco, with its occasional exhibition of the products of the genius and handicraft of the mechanics of our State.

It is in comparison of results that rivalry is encouraged. It is in the exhibition of models and improved machinery that invention is stimulated. It is healthful and pleasant to mingle together in social and intellectual companionship.

The occasional Fair and report is a milestone upon the road of progress, while the financial profit buys books for the library and furnishes reading room and club, where conversation, amusement, and recreation affords a relief from the weary tedium of constant labor.

California has made rapid and substantial progress in all the practical and elegant arts, but still there is a wide field before us for further advancement.

It is but a brief period of time since this, our beautiful State, was almost unknown to the civilization of the world. It lay like a white and glittering pearl upon the ocean's shore, valueless in its unnoticed beauty, till found and set with other jewels in our glorious diadem of States.

Less than twenty years ago, where we now assemble, the coyote called his mates, and in the chaparral of the sand hills the long-eared rabbit found his home; in our harbor a single hide drover swung lazily at anchor, awaiting its freight of skins and tallow. Now mark our busy commerce, that plies to every ocean. Then, our glorious valleys lay basking idly in the sun; now, teeming with busy industry, laden with bending grain; our hill sides rosy with the fruitful vine. Then our mountain caverns held enchanted wealth, till, touched with the magic of industry, the spell was broken, and poured their streams of golden plenty throughout the land.

I know it is a hackneyed theme to dilate upon the fertility, resources, and greatness of our State; I know we are accused of vanity and boasting, when abroad we undertake to describe the marvels of our glorious land. But who that has lived amid its plenty and drank from its cup of beauty—who that has breathed its glorious atmosphere and trod upon its fertile soil, that does not love this new home of our adoption, and love it the more because it is ours? And why? Because by our valor we conquered it, by our industry we created it, by our enterprise we have developed it, and by our loyalty we have aided to maintain it.

We are vain and proud, not only of what we are, but of what we propose to become—first of the American States. First in morals, learning, and wealth; first in agriculture, manufactures, and commerce; first in wine, and wool, and gold; first in industry, enterprise, and genius; first in brave and honorable men, as we are now first in beautiful and virtuous women.

Reports of the Examining Committees.

FIRST DEPARTMENT.

ON STEAM ENGINES AND MACHINERY.

Committee:

CHARLES C. BEMIS. HENRY S. SMITH. THOMAS WINSHIP.

The importance of steam power, and the uses of labor-saving machinery throughout the industrial world, are too well known at this day to require comment. In the case of California and the Pacific slope of the United States, the use of steam power has played so important a part in developing the resources of the country that it stands pre-eminent among the favoring causes that have led to our present state of prosperity, and promise of future greatness. Isolated from, and, as it were, lost to the influences of the great manufacturing enterprises which have made the nations that possessed them powerful beyond all others, the prosperity of the Pacific slope of the United States, in the absence of machinery and steam motive power, would have languished for many decades of years before attaining to its present greatness.

The high price of skilled labor, the difficulty of obtaining regular supplies of materials for manufacture, with great and injurious fluctuations in value, and the excessive rates of interest for money, all combined to deter and prevent the investment of capital in the home-manufacturing of machinery for the uses of the people. Fortunately, under all these discouragements, the wants of the country were so imperative for mining machinery that could only be made under the direction of operators in the vicinity of where it was needed, that foundries and machine shops had to be erected. These, once established, machinery for other than mining purposes was called for, and the different specimens exhibited in the Fair afford good evidence of our ability to furnish all machinery that the demands of our people require.

Steam Engine from the Union Iron Works, San Francisco, H. J. Booth & Co., proprietors.—This Stationary Steam Engine furnished nearly all the motive power for the various machines in operation at the Exhibition, and was built by the exhibitors. It is beautifully finished, and is judiciously and elegantly proportioned in all its parts. It works smoothly and steadily, and challenges the admiration of all.

We would here remark that the steam engine of the present day is necessarily somewhat more complex than that of an earlier period, on account of the finer adjustments of speed, and the rigid economy of fuel required to meet the demands of manufacturing, and the closest competition in all branches of industry. In the march of improvement these demands have sometimes been met by giving to certain vital parts of the machine merely an improved form, which embodied, in a high degree, the laws applicable to the particular requirement. This expedient, however, is not available in all cases, but the addition of new and delicately-working

parts is required, without the aid of which the fullest economy of power cannot be obtained. Each avenue of loss has also to be carefully guarded, and, in all cases, the greatest simplicity of parts secured, compatible with the functions to be performed. The engine on exhibition has a cylinder fourteen inches in diameter and thirty inches stroke. The builders seem to have been fully aware of the importance of perfecting the details of the machine, as well as caring for its more general proportions, in order to secure that continued well-working and uniform rate of economy necessary to give character to their manufacture. This engine is provided with Scott & Eckhart's Variable Expansion Valves, the speed of the engine being regulated by the valves closing their ports variably from the commencement of the stroke to the point of loss in valve, the change of speed being attained by an attachment to the governor. This arrangement of expansion works noiselessly and effectually, the engine being entirely under the control of the governor.—Awarded a gold medal.

Steam Engine from the Vulcan Iron Works, San Francisco.—This new double-piston Steam Engine was in operation during the entire exhibition, furnishing power for various machines. Its high velocity, the fine finish of its workmanship, the ingenuity of its design, the regularity of its motion, and the perfect ease with which it seemed to perform its work, attracted for this engine a large share of attention.

This stationary Steam Engine is eight inches diameter of cylinder, with two pistons, each eight inches stroke—the rod of one working through the hollow rod of the other. The crank-shaft has three cranks, two of which are attached to the cross-head of the hollow piston-rod of the back piston. The steam is admitted by a slide-valve in the center of the cylinder, between the two pistons, and exhausted from both ends at the same time, giving the whole pressure on the pistons turning the crank-shaft. When the pistons arrive at the ends of the cylinder the steam is admitted simultaneously upon each piston, and the exhaust takes place from between the pistons through the center port. The lap or lead may be obtained as in the common engine, if thought advisable, or a cut-off may be applied of any usual form. The advantages claimed for this engine by the manufacturers are, that it is perfectly balanced in the performance of its work by the combination of the double piston-head, enabling it to be run at a much higher velocity than a single engine, and requiring less foundation, consequently less expense in setting up. The steam being admitted to the opposite pistons at the same time, and communicated to the double cranks, obviates the necessity of a heavy bed-plate. It gives double the power, running the same speed of piston with the same diameter of cylinder as the single engine, and the whole weight of this engine is but 2,500 lbs., while the single engine, of the same power, weighs 4,500 lbs. The Committee believe that for many purposes this engine is entitled to much consideration from those interested in running steam machinery. We are informed that this new motor will be used by the manufacturers to drive the machinery of their works, taking the place of an ordinary single engine of 12-inch diameter of cylinder and 20-inch stroke. This will test the results claimed through the ordinary channels of power, and afford good data for comparisons of economy in working.—Awarded a silver medal.

Construction Valve Indicator, by W. R. Eckhart.—This Indicator is manufactured of silver, and is finely finished and of ingenious construction. It is the invention of W. R. Eckhart, of this city, first draughtsman at H. J. Booth & Co.'s Iron Works. The usefulness of this invention in the construction of steam engines is of much value to those who understand its application. In the mechanical drawing-room much valuable time and labor is spent in calculating and designing the movements of the delicately-working parts of an engine. By the aid of this ingenious device may be determined, without calculation or the forming of complicated lines, the position of the crank, together with that of the main valve and any cut-off valve that depends upon variable lap to cut off the steam (such as Meyer's, Edwards', Lagavrian's, Bodmer's, &c.). It also shows the amount of lap that a cut-off plate should have to cut off at any given point of stroke. It shows the amount of lap lead and position of crank, expansion of cut-off and main valve by simply moving the parallels around a given center, they adjusting themselves to the point required. Awarded a silver medal.

Stoddart's Steam Pump, by David Stoddart, San Francisco.—This steam pump is a decided improvement, simple in construction, strong and efficient in action. The Committee submitted it to various severe tests, with the most satisfactory results.

Its purpose is to elevate water to great heights from shafts, or for hydraulic mining; also to feed high or low-pressure boilers on board of steamers, and to be used as a fire pump in case of necessity. For extinguishing fires on steamers or in manufacturing establishments its value is unsurpassed. It may be placed in the hold of a steamboat and instantly set in motion by simply turning on the steam from the deck or engine room, with the absolute certainty that the pump will immediately work. It can be run as slow as one stroke per minute, and it will deliver its water with the same certainty as if making forty or sixty strokes per minute. The Committee have never seen a steam pump that was more satisfactory in performance, and they have no hesitation in endorsing its claim of superiority for the above purposes.—Awarded a silver medal.

Harrison's Rotary Steam Pump.—This steam pump is the invention of Chas. H. Harrison, of this city. It was in constant operation during the Exhibition, and was looked upon with much interest by the visitors, on account of the large stream of water discharged and the regularity of its motion. The Committee were informed that the pump exhibited had the capacity to raise 500 gallons of water per minute to a height dependent on its velocity. It seems to be peculiarly adapted for raising large bodies of water to small heights, and also has the valuable quality of great durability in its construction. Usually there is much waste of power in pumps from the sudden changes of direction and velocity to which the water is subjected in its passage through them. The improvements in this pump are intended to obviate this objection. This pump is driven by one horizontal steam engine attached to the cylinder, the whole apparatus being arranged in a very convenient and compact form for wrecking purposes. We believe it would be found equally as effective for bilge pumps, or for drainage purposes, where the quantity of water to be raised is large, and the lift not too great.—Awarded a silver medal.

Woodworth's Steam Pump.—This steam pump, built by H. J. Booth & Co., Union Iron Works, San Francisco, is of excellent finish and worked well. This steam pump has established its own report throughout the United States, and needs no commendations from this Committee.

Foot-Lathe with Double Slide Rest, by Adolf Hecker, San Francisco.—This is a small foot-lathe calculated for iron, brass, and wood-turning. It is of neat design, good workmanship, well finished, and a credit to the maker.—Awarded a diploma.

Steam Engine by E. T. Steen, San Francisco.—One steam engine, of California make. It is twenty-five horse power, and no piece, except the fly-wheel, weighs over 550 lbs. It can be put up right or left hand without altering a single piece of its combination. The piston requires no adjusting, is always steam tight, and will not cut the cylinder.—Awarded a certificate of merit.

ON QUARTZ AND MINING MACHINERY.

Committee:

J. A. HOBART. JOHN ROACH. WM. H. SCOVILLE.

The importance of this branch of mechanical science, as connected with the well-being of California and her adjacent sister States and Territories, can scarcely be overrated. Removed from the workshops of the Eastern States by thousands of miles distance, which takes months to overcome, the best interests of our State would have crept on with feeble progress, instead of by those free strides to wealth and greatness which the development of home industry in our midst has produced. Less than fifteen years have passed since the first mining machinery was constructed on this coast, crude and insufficient for a practical proving of the richness and inexhaustibility of our mineral wealth. As time has passed the inventive talent of our people has been found equal to the requirements of a varied mining, which now embraces almost every variety of precious ore known to the world, the which cannot be found elsewhere in the same area of country.

Under these circumstances, the people of the Pacific Coast may take pride in the numerous improvements in our mining machinery, which, at this time, stands confessedly superior to that of any other country. The present exhibition of this kind of machinery is the result of the inventive genius of some fifteen persons or firms,

and have been carefully examined by the Committee. Last year there were exhibited stamps and crushers for the reduction of ores to a workable size for further treatment. This year the exhibitors in this class are fewer in number.

Hanscom's Crusher.—A small model only being exhibited at work, is favorably recommended by the Committee as deserving the award of a silver medal.

Crusher by Bargion & Johnson.—An incomplete model, in some particulars, which the proprietors admit to have been imperfect in construction, the which being remedied, the committee have no doubt will prove a valuable machine.—Awarded a certificate of merit.

Brodie's Crusher.—Apparently a valuable machine, but, not being worked, the committee are unable to judge of its efficiency.

Hammer Battery by Rix & Logan.—This machine is designed to do the work now done by the wet stamp battery. Its distinguishing feature is the revolving horizontally within the pan of several hammers, with their faces outwards, by jointing the ends of their handles to revolving arms, so that, while the hammers are drawn around, they swing outwardly, from centrifugal force, and strike against dies placed about the pan on the inside. These dies are so placed that each hammer strikes upon one and then leaps to the next, giving blows similar in every respect to common hammer blows, except that they are drawing. The machine can be so constructed as to give such weight and velocity to the hammers as may be desired, thus securing the most economical blow for the purpose required. The method of feed and discharge are of the simplest character, no hopper, feeder, or screws being used, the ore being shoveled into the pan, and the pulp being drawn from the center by a pipe. This battery contemplates a complete change of system, by dispensing with the heavy stamps and bed-plates usual to such machines. By the decrease of weight the cost of transportation and other expenses are materially lessened, which should create a great demand for this species of wet crushing battery. The committee have carefully examined the model, and, being satisfied with the quality and quantity of work done, in comparison with the small amount of power required, do recommend this machine as deserving a silver medal.

Roasting Furnace by William Bruckner.—For sulphurets or ores needing roasting, this seems to be a novel contrivance, subjecting the material to be treated to the direct flame of the fire, by continuous rotary motion, which, by a screw fan, constantly presents a new surface to the flames, thereby saving one-half, or more, of the time usually required in roasting the mineral. The condensers at the back of the revolving cylinder catch all vapors, except what may pass off at the chimney. In the opinion of the committee, these siphon-like condensers, as exhibited, are not sufficiently large to accomplish all that the inventor claims. The committee recommend the invention as deserving a silver medal.

Grinder by J. M. Beth, who exhibits a grinder of simple construction, and efficient as a working machine of easy manipulation, for which the committee award a diploma.

Knox Pan used as an Amalgamator and Separator.—For a recent addition of a steam bottom, in connection with this well known pan, the committee award a silver medal.

Hinkle's Grinder and Amalgamator.—A small model exhibited worked well. The grinding being against the sides and not on the bottom, the current is made towards the center. When at the top of the pan, or grinder, the pulp is brought in contact with a copper amalgamated plate, directing the current by both its surfaces, and intercepting the valuable metal. Large sized machines, on this principle, are constructed. The committee award a certificate of merit.

Strong's Union Pan.—This pan has double-reversing motion grinders. The lower grinder, on bottom of pan, by rapid motion, gives the pulp a direction towards the periphery on the upper surface of the grinders. Another set of shoes play or revolve in a contrary direction, having a tendency to check the fluid set in motion by the lower shoes, and thus, between these counteracting currents, the pulp is brought rapidly in communication with the grinding surfaces. In the opinion of the committee it is questionable whether these double sets of shoes are a benefit in proportion to the power which is necessarily required to work them.

Hepburn's & Peterson's Pan.—This is a good, solid, substantial pan, with steam bottom, capable, no doubt, of doing good work. The committee could not judge in that particular, from the fact that it was not set in motion.

Varney's Pan.—This pan has a great and wide-spread celebrity. All the points of superiority claimed for it could not be embodied in a brief report by the committee. Having seen it in operation at the Exhibition, the committee recommend it as a valuable pan, and award it a silver medal.

Wheeler & Randall's Pan.—This pan is of the latest model. In the small pan on exhibition (95) ninety-five pounds of very refractory rock, of bean size, was reduced to a fine pulp in (55) fifty-five minutes. The working of the pan gave satisfaction, and the committee deem it deserving of a silver medal.

Baux' Pan.—This machine combines, as claimed, a grinder, amalgamator, and separator. The pan is shallow, with a convex top rising to the center, at which point the rejected material is discharged into a sluice-box on the outside. The material to be treated is fed by a hopper on the side, where a stream of water carries it down. A continuous flow is kept up, if desired, and when the pulp, or other matter, is sufficiently ground, it is floated off, while the metal or heavy particles are allowed to be kept in longer contact with the quicksilver. The charging of this pan is continuous, and may be carried on until the amalgam is sufficiently strong, thus avoiding repeated charging and cleaning. The committee award it a silver medal.

Concentrator.—To J. Hendy, who exhibits a Prater Concentrator, the committee award a certificate of merit.

Concentrator.—By A. Hunter, who exhibits a Concentrator and Amalgamator, which has been working to the satisfaction of the committee, who award him a silver medal.

Crusher, by Henry Pearce, who, towards the close of the Fair, entered it for exhibition. The short time this machine was on exhibition, and the rules of the Fair, excluded it from taking a premium. The committee, thinking favorably of it, recommend an award of a certificate of merit.

Soap Stone Machine, by John Dougherty.—This was a rough contrivance, showing much ingenuity, the saw working upwards, thereby cleaning itself from the dust it makes, and cutting the stone remarkably fast. The committee deem it worthy of a certificate of merit.

In concluding their report, the committee would state that, desiring to be just to all parties exhibiting, they have listened attentively to explanations from the proprietors of Reducers and Amalgamators combined. The committee regret, however, that the Fair has not afforded facilities for a practical testing of the superiority of the machines offered for competition, and they, therefore, feel it their duty to withhold a first or special premium from either of the exhibitors of this class.

ON HYDRAULICS.

Committee:

F. G. HESSE. S. DINSMORE. IRVING M. SCOTT.

Leffel's American Double Turbine Water Wheel.—This wheel may be considered as a combination of the Jonval and the inward-flow turbine, known under the name of central-discharge wheel. The lower wheel acts on the principle of the Jonval turbine, but, instead of receiving its supply from the top, the guide-plates are placed outside the wheel, so that the water flows from the outer circumference inwards on the wheel, to be discharged, like Jonval's, at the bottom. The upper wheel receives the water in the same manner, but discharges towards the center, at the inner circumference of the wheel. The form of the lower wheel has a tendency to give the water a downward motion, so as to balance part of the weight, to relieve the step. It is the opinion of the committee that such a combination cannot increase the average efficiency of both wheels combined above that of either wheel, provided both wheels separately yield the same effect; but, if there is a difference, it follows that the average efficiency of both wheels combined must be less than that of the superior wheel. The adjustable guide plates are well adapted to prevent loss through the contraction and expansion of the stream. It is the opinion of the committee that such a combination of wheels might be turned to great advantage by furnishing simple means of closing the inlet or outlet openings of the upper wheel entirely, whereby the same wheel could be

used with the same advantage and efficiency for very small and large quantities of water. The committee recommend the workmanship and general adaptation of the turbine, and give their opinion, in the absence of practical tests made under their own supervision, that its efficiency will compare favorably with some of the best wheels.

Tyler's Improved Water Wheel, entered by Smith & Hanscom, Agents for California.—This wheel recommended itself at once, on account of its simplicity, consistent with the true principle of its action. It is an inward flow turbine (central discharge vortex) wheel. The guide-plates are all united in one, forming a spiral passage for the distribution of the water. In the opinion of the committee, the disadvantage of such an arrangement, in producing more friction, deserves little consideration if compared with the great benefit resulting therefrom, viz., simplicity of construction, cheapness, and durability.

Both of the above described wheels, being of Eastern invention, they cannot compete for premium.

Excelsior Pump, W. D. Hooker's Patent; and Hansbrow's Pump.—Both of these pumps are California inventions, and enter into competition as to their superiority. Both contain different points of merit, which, as a whole, are so evenly balanced that the committee were unable to discriminate between their claims, but awarded to each, for their respective excellent qualities, a silver medal.

ON MINERALS, COLORS, ETC.

Committee:

H. C. BENNETT,

W. BAUSMAN.

The mineral resources of California and the adjoining States and Territories are so varied in character, spread over so large an extent of country, and so wonderful in richness of ore as to excite surprise and elicit the admiration of the nations of the world. Though a comparatively barren and desolate country, whose vast area was considered almost valueless, and promising but few attractions to the emigrant, the excitement produced by the discovery of the precious metals in California, caused a flow of travel and of population to settle in the land, unparalleled in the history of nations. The epochs of the discoveries of minerals on the Pacific slope of the United States have been so near together and continuous as, scarcely, to be entitled to separation. Commencing with the discovery by Casterillo of the quicksilver mines of New Almaden in 1845, but twenty years have sufficed to bring to the knowledge of the world a richness of varied mineral resources in California and the adjacent country, hitherto unequalled. In 1848, Marshall discovered gold deposits at Coloma, which led to further researches and discoveries, the attractions of which has developed, as it were, a new nation on the Pacific coast, and stimulated the building of a trans-continental railroad, unequalled in magnitude, the completion of which promises to be witnessed by the present generation. Following the discovery of gold, in 1848, came that of coal, which was found at Bellingham Bay, Washington Territory, in 1855, at Coose Bay, Oregon, in the year following, and in the vicinity of Mount Diablo, in this State, in 1858. Besides these, other well-defined evidences of coal deposits have since been found in various places throughout the State, and appearances now justify the assertion that, before many years have passed, California will export largely of this mineral, which plays so important a part in the prosperity of all civilized nations.

In 1856, immense deposits of rich copper ore were discovered in Calaveras county, and, from present indications, other portions of the State promise to prove equally valuable in deposits of this mineral, which promise, if realized, will make this the greatest copper producing country of the world.

In the autumn of 1859, the discovery of silver ore in Washoe, then a portion of Utah Territory, and now the State of Nevada, created an excitement which resulted in the development of mines that now produce annually more silver than is needed to meet the entire wants of our nation for coin and other purposes. With the development of this mineral wealth in Nevada has come the permanent settlement of that State and a knowledge of agricultural resources in that comparatively barren country, not before supposed to exist. Besides the above-named valuable minerals, there have been found in California indisputable evidences of the existence of many

others, well known to commerce and manufactures, the requirement for which will doubtless stimulate their practical development at an early day. Among these may be mentioned iron, lead, tin, sulphur, borax, arsenic and antimony, the production of which will open new fields of labor and enrich the State. While, in one sense, the mineral resources of the Pacific coast can scarcely be termed "mechanics," still, the production of the precious and other metals opens a wide field for mechanical invention and labor, and has already done more to cause the production of manufactures and machinery among us than all the other interests of the State combined. With these immensely valuable products, but with no practical mining knowledge among our people except that acquired by actual experience and hard labor, we have as yet scarcely prospected our mineral wealth. Could the mining population of our State acquire but a smattering even of scientific knowledge of the various forms in which minerals are found, there is no doubt but that much, now passed by as valueless, would be found to pay well to work, either for home use or for export. To remedy this great want we need a mineralogical school or college, with a museum or cabinet attached, for a display of the different forms of ore and the furnishing of reliable information as to their value for profitable working. This should be a State enterprise, and its cost, if located in a proper place, would be a thousand-fold repaid by its results. With a better knowledge of minerals, the misrepresentations of interested and designing persons would, in a great part be checked and parties disposed to invest in mining enterprises have a safeguard against the many mining swindles such as have been perpetrated heretofore.

The collection of minerals in this department was much larger and more valuable than was ever before exhibited in this city, and gave some idea of the almost limitless list of the mineral products of this coast. The most prominent object in this department was the exhibition of samples of

COAL.

The exhibitors of coal were not numerous, but the specimens presented were of large size and excellent quality.

The Black Diamond Company sent a very fine specimen, weighing upwards of 3,000 pounds, from their mine at Mount Diablo.

The Eureka Company sent an enormous mass, weighing nearly 6,000 pounds, from their mine at Mount Diablo, but it arrived too late for exhibition.

The Fuca Straits Coal Company sent a specimen from their mine, located in Washington Territory. This very fine sample, which weighs 150 pounds, was accompanied by a very interesting case of fossils, obtained by their exhibitor, V. M. Faucoult, from the rocks overlying the deposit of coal, which fossils are of great value to men of science as aids in fixing the geological position of the coal measures on the Pacific coast.

There was also on exhibition a specimen of coal, of good quality, reported to have been taken from a vein near Mayfield, Santa Clara county.

All the samples of coal were of better quality than those exhibited last year, thus clearly showing that with the increased depth of mines the coal improves in quality, and giving good reason to hope that in time coal suitable for smelting purposes may be obtained. The product of the coal mines near Mount Diablo is over 4,000 tons per month.

GOLD.

The displays of gold specimens on exhibition were very numerous and interesting. Aside from their intrinsic value, the arrangement of the specimens was excellent, affording the public a good opportunity of comparing a great number of samples.

Captain J. M. Aiken exhibited a beautifully arranged collection of specimens of gold from all parts of this State, and from Oregon, Nevada and British Columbia, which displayed more difference in appearance than was by many supposed to exist. This collection was one of the most popular features of the Fair. In it was exhibited the largest mass of crystallized gold, probably, ever found in the State. Also, a very large number of specimens of quartz and placer gold, and upwards of 400 vials containing auriferous sulphurets from various mines.

Timothy Hinckley exhibited a fine mass of native gold, weighing eight pounds, and valued at \$2,000, taken from his claim near Jackson, Amador county.

Besides the above, there were a great number of smaller collections of gold quartz from mines in all sections of the State, which the Committee have to omit mention of for want of space in the report.

SILVER.

The display of silver ores in the Exhibition was both valuable and varied. Many of the specimens exhibited from the mines of Lower California, Arizona and Mexico, were of large proportions and great intrinsic value.

The "Consolidated Company of Eureka District," Arizona, exhibited a mass of argentiferous galena, which weighed 650 pounds.

The Emilia mine, at Guerrero, Mexico, exhibited some very fine specimens of silver ore, as did the Neustra Señora del Carmen mine, of Mexico, which were very rich in native silver. There was a good display of silver ore from the Comstock Ledge, Reese River and other districts in Nevada, as also from Silver Mountain and other districts in Alpine county, and from Placer county, in this State.

COPPER AND COPPER ORES.

The display of copper and copper ores on exhibition afforded a pleasing proof of the rapid progress made in the development of this important branch of the State's resources.

The Union mine, at Copperopolis, furnished the largest mass of sulphurets and the most beautiful cabinet specimens of native copper and copper ores. One mass of sulphurets sent by this company weighed 1,205 pounds, and another weighed upwards of 1,000 pounds, both being free from gangue rock. This company also exhibited two fine specimens of filliform native copper.

The La Victoire mine, Mariposa county, exhibited some fine samples of sulphurets and oxides, and a peculiar talcose ore, containing large plates and masses as well as fine grains of metallic copper.

The Sauce mine, in Lower California, exhibited a very fine assortment of ores, similar to those from the La Victoire mine, and known to contain a large percentage of both gold and silver.

There were several other fine collections of copper ores exhibited from mines in different portions of the State, which were of much interest. Of metallic copper there were several exhibitors.

Haskell & Co. exhibited twelve bars of very fine copper, the same being a sample of five tons obtained by operating on the ore of the Lone Tree and Dozier mines, in Mariposa county—chiefly oxides and carbonates. These parties deserve great credit for their enterprise in endeavoring to smelt the ores of copper in our State. These, in many cases, containing but a low percentage of metal, which the cost of transportation precludes shipping, would, therefore, in the absence of smelting or concentrating at the mines, practically prove valueless.

Mr. Meader, of the Union mine, Copperopolis, exhibited specimens of copper "matte" or "regulus," obtained by concentrating the poorer ores of that mine, which, otherwise, would have been worthless, owing to the high cost of transportation and other expenses necessary to bring it to market.

TIN AND ITS ORES.

There was a very fine collection of tin ores on exhibition from several localities in Mexico.

The North American Tin Mining Company exhibited a large and beautiful collection of ores from their mine at Durango, and five large ingots of the metal obtained from the ores.

The Durango Company, who have a mine in the same locality, also exhibited a fine collection of ores.

LEAD.

There were a number of very fine specimens of the ores of this metal on exhibition, chiefly carbonates and sulphurets.

BLACK LEAD, OR GRAPHITE.

The Eureka Plumbago Mining Company exhibited a number of large specimens of the product of their mine, of which large quantities are shipped to the Atlantic States and Europe.

There were quite a number of exhibitors of what appeared to be graphite, from a number of places in the State, but which was, really, an ore of manganese, and of little value at the present time. The opportunity to compare the two ores, as afforded by the Fair, will, probably, be the means of saving future expense and annoyance to those who had previously confounded the ores with each other.

PRECIOUS STONES.

Captain Aiken exhibited a very fine collection of precious stones, found in this

State, which, in number and variety, exceeded any previous display. Among them were a diamond of good lustre, a topaz, a number of rubies, a handsome cluster of garnets, a number of rough emeralds, and a very large collection of opals, polished and in the rough, and imbedded in the matrix in which they are found.

A very interesting collection of opals, jaspers, agates and carnelians was on exhibition by a lady, who had collected the same on the sea beach, a few miles distant from San Francisco.

RARE METALS.

Captain Aiken exhibited specimens of rare minerals, among which were sodium, aluminum, magnesium and platinum.

MISCELLANEOUS COLLECTIONS.

L. Leland & Co., of the Occidental Hotel, exhibited a very valuable and interesting collection of specimens of gold, silver and other ores, from the States and Territories on the Pacific coast. Also, fossils, curiosities, etc., which attracted a great deal of attention.

Dewey & Co., of the "Mining and Scientific Press," also exhibited a very interesting collection of similar articles.

COLORS AND CEMENTS.

The Pacific Color Company made a very handsome exhibit of crude and prepared colors, made by them from the earthy and other mineral substances which abound in this State. This enterprise is of recent origin, but promises to become a very important branch in the manufactures of the State.

There were also several samples of ochres, fuller's earth, pipe clay, and other valuable earthy substances, on exhibition from various portions of the State.

BORAX.

Samples were exhibited of borax, both crude and refined, the same having been collected and manufactured in this State. This article has been found in such abundance and purity that exports of considerable quantities are being made to the Atlantic States. Not only can the large requirements of the Pacific coast for borax be supplied from California, but the testimony of scientific men, who have examined the deposits, or rather springs of this acid, near Clear Lake, is that it can be produced in such quantity and cheapness as to lower the price of the article throughout the markets of the world.

CALIFORNIA COLORS.

By G. J. W. Gibb & Co., San Francisco, one case California colors. These colors were manufactured by the Pacific Color Works, in San Francisco, from minerals obtained on this coast. In the collection is yellow ochre, raw sienna, rose lake, besides dry colors and furniture polish; awarded a diploma.

RECAPITULATION OF MINERALS, ETC.

Capt. J. M. Aiken, for cabinet of minerals, a silver medal; California Borax Co. San Francisco, for borax, a silver medal; Black Diamond Coal Co., B. H. Ramsdell, agent, San Francisco, for best specimen of coal, a diploma; G. J. W., Gibb & Co., San Francisco, California colors, a diploma.

Second Department.

ON LEAD WORKS.

Committee :

JOHN C. AYRES.

A. E. PHELPS.

C. H. ROBBINS.

This was the first exhibition of a new and important branch of manufacture, just inaugurated on this coast. Owing to the mining and other requirements of, virtually, a newly settled country, the demand for the various articles of lead manufacture have, with us, been largely in excess of that of older States of the same population. Being far removed from the sources of supply, there have been periods in which various branches of manufacture and labor were unfavorable affected by the scarcity, and consequent high prices, of the required articles of lead manufacture. With the establishment of home manufacture, the injurious fluctuations in the value of these articles will, doubtless, be avoided ; and, besides giving employment to many in the manufactory itself, the use of the raw material may stimulate mining for lead in the island of Santa Catalina and other places of deposit on our coast, and, in time, cause other branches of metal refining and manufacturing to be established among us.

Lead Pipe, Sheet Lead, and Shot, exhibited by the San Francisco and Pacific Lead Pipe, Sheet Lead, and Shot Works ; T. H. Selby, & Co., Agents.—There being no competition in this department, does not detract from the merit due to Messrs. T. H. Selby & Co. for their enterprise in erecting the only lead works now in California. The articles exhibited were of most excellent quality, fully equal to any imported, and showed conclusively that California is now in a position to be independent of all, and equal to any of the older countries in the manufacture of these articles. For this exhibition of these articles the committee award a silver medal.

ON STOVES, IRON PIPES, CHIMNEY TOPS, MILK CANS, ETC.

Committee :

M. DE LA MONTANYA.

T. HADLEY BRYANT.

Bullard & Battles, San Francisco, four Petroleum Stoves, with Furniture.—These stoves are designed for all kinds of cooking and general housework, with a radiator attached, that will heat apartments. They are portable, emit no smoke or smell, and do the work well and quickly.

J. A. Dibble, Santa Clara, exhibited two large milk cans, with planished tin.—Awarded a first premium.

W. W. Walmsley, San Francisco, had on exhibition five pieces artesian well pipe, and two pieces ventilators.

A. Brown, San Francisco, exhibited one range and fixtures, with boiler attached, one chimney top, one ventilator, and a large display of milk cans, ranging in capacity from one quart to ten gallons each, together with measures, strainers, scoops, etc.

G. Moening, San Francisco, exhibited one stove and fixtures, with an ingenious contrivance attached to the stove for the purpose of keeping a constant supply of warm water, which is his invention ; also, a lot of tinware.

John Bohn, San Francisco, exhibited one stove and fixtures, and six articles of tinware.

Johnston and Reay, San Francisco, had on exhibition, in this department, one range, one stove, and one patent chimney top and ventilator. This ventilator was invented and patented by the exhibitors. It is of the centrifugal pattern, and is warranted to cure smoky chimneys in all cases.—Awarded a silver medal, for being the best on exhibition.

Caleb M. Sickler, San Francisco, exhibited two stoves, one Putnam's wringer, and one lot of coal hods, &c.; also, a fine display of milk cans and tinware, for which he was awarded a second premium.

Taylor & Iredale, San Francisco, exhibited one stove, "Fire King," of California manufacture, and one stove, "Peacemaker," imported. The "Fire King" was invented and manufactured in San Francisco, and presents a greater variety and more perfect combination of principles than any stove ever before devised, for which it was awarded a silver medal.

H. Harrison, San Francisco, had on exhibition a model of a patent chimney top.

J E Jorgensen, San Francisco, exhibited one air-tight stove; also, two Hendrickson's chimney tops, for which he was awarded a second premium.

Robert Gaster exhibited three "tea economizers."

John B. Owens, San Francisco, had on exhibition an assortment of coal oil lamps; also, samples of coal oil cook stoves, designed for heating and nursery purposes.

ON BRASS WORK.

Committee :

JOHN C. AYERS,

A. E. PHELPS,

C. H. ROBBINS.

Wm. T. Garratt was the only exhibitor in this department of mechanical skill. He exhibited a large variety of water guages, valves, cocks, globes, whistles, hydraulic pipes, couplings and fire torches of California manufacture, which, in the opinion of the Committee, will compare favorably with, if not exceed in finish anything of the kind manufactured here or elsewhere; and they would recommend the same to the public.

Mr. Garratt exhibited also a large bell, weighing $637\frac{1}{2}$ lbs., being the heaviest ever cast in California. This bell, together with a small ship bell, cannot, in the estimation of the Committee, be surpassed; and they are creditable alike to California and the manufacturer. The Committee award a silver medal.

ON GARRATT'S METAL.

Wm. T. Garratt, of San Francisco, exhibited a composition of white metal for journals and other friction purposes connected with machinery. This metal has been tried by many of the large foundry and machine shops in this city, and has in all cases proved successful. In a number of cases of heavy upright shafting, where steel buttons fused from extreme heat caused by friction, Garratt's metal was substituted, and fully answered the purposes required.

Those who have used the metal for heavy anti-friction purposes report it superior to any heretofore known. This metal is an Eastern invention, discovered by the father of the exhibitor. Awarded a diploma.

Gallagher & Weed exhibited one gade brass castings; two gades brass nails; one 2-foot engine gong. For the gong and castings the Committee would recommend the award of a diploma, as being a perfect result in casting and finished brass works. Awarded a diploma.

FIFTH INDUSTRIAL EXHIBITION

ON COMBINATION LOCK.

Committee :

C. F. JONES, SAMUEL F. BLASDELL, S. H. ROUND.

The Committee report the following: The United States Combination Lock, manufactured by the U. S. Combination Lock Co., of Springfield, Mass., exhibited by V. S. W. Parkhurst, is what its exhibitor claims it to be, *i. e.* "not liable to be opened without the key and a knowledge of the combination by which it was locked." The Committee deem it safe and reliable, and well adapted for bank vaults and safes, for stores, offices, dwellings, etc.—the combination decreasing with the size of the lock; and, in the opinion of the Committee, the lock is entitled to such consideration as will testify to its merits. Awarded a certificate of merit.

ON BRASS, COPPER AND IRON WIRE, CABLES, &c.

Committee :

JOHN C. AYERS, A. E. PHELPS, C. H. ROBBINS.

The only exhibitors in this line were A. S. Hallidie & Co., who made a very fine display of the above named articles of California manufacture, and of excellent quality. The Committee award a silver medal.

ON WIRE WORK.

Committee :

JOHN C. AYERS, A. E. PHELPS, C. H. ROBBINS.

A creditable display of California wire work, such as fenders, seives, model-stands, screens, traps, wove wire, etc., etc., was made by H. T. Graves. There being no competition in this branch of the exhibition, the committee awarded Mr. Graves a diploma.

ON CIRCULAR SAWS.

Committee :

JOHN C. AYERS, A. E. PHELPS, C. H. ROBBINS.

To N. W. Spaulding for a very creditable display of imported saws, and for saw-teeth, patented and made by him in San Francisco, the merits of which consist in the preservation of the saw-plate, the committee awarded a silver medal.

Sheffield & Patterson exhibit mill, muley and butcher saws, manufactured in San Francisco.

Space will not admit of an extended notice of this portion of the exhibition. The superiority of these saws over all others which have come under the notice of the committee, was so evident that they cannot refrain from giving *Sheffield & Patterson* credit for producing the best display of these articles in the exhibition. For beauty of finish, with every improvement and patent combined, the saws exhibited by them, in the opinion of the committee, have no superiors anywhere.

For saw-teeth in the mill and muley saws, the improvement of which eonsists in the prevention of the teeth from clogging, the committee would recommend the award of a first premium.

ON MIRRORS.

Committee :

H. G. BLOOMER,

JOHN BREWSTER.

This branch of manufactures was inaugurated in California about two years since, by Messrs Cameron, Whittier & Co., who constitute the only firm on the Pacific coast engaged in the business of plating mirrors. Although all the materials used, with the exception of quicksilver, are imported, yet the manufacturing of mirrors here has proved, as it will in the future prove, of considerable benefit to our people, as every variety of glass, or size of mirrors needed, can be plated to suit the wants of purchasers when required. It is one step towards making California dependent on her own mechanieal skill, and its success, in turn, has stimulated the development of kindred enterprises.

Plated Mirrors by Cameron, Whittier & Co.—The eommitee have examined the large plate exhibited by this firm, the only one of California manufacture in the Fair, and, finding it equal in workmanship and appearance to any imported, award a silver medal.

Plated Mirrors imported and exhibited by Rosenbaum & Co. The committee find that, by a new process of fastening the silver upon the plate, it is claimed to be water-proof, and better adapted to handling and transportation than usual. The color of these plates, however, seems to have been unfavorably affected by this process. The committee recommended the award of a eertificate of merit to the exhibitors, the plate showing meritorious work. Awarded a certificate of merit.

ON SHOT GUNS, RIFLES, ETC.

Committee :

W. H. BROWN,
WARREN LOUD,

W. B. FARWELL.

SAMUEL F. BLASDELL,
JOHN K. ORR,

The eommitee after earefully examining the shot-guns exhibited by Messrs. Villegia, R. Liddle & Co., and A. J. Plate, decide that for superior workmanship, style of gun, and general utility, the gun exhibited by Messrs. R. Liddle & Co. is entitled to the first premium.

The committee examined the rifles exhibited by Messrs. Slotterbaeh and Liddle & Co., and decide that for superiority of workmanship, and general use as a *target and field rifle*, the rifle exhibited by Messrs. Liddle & Co. is entitled to the first premium—Mr. Warren Loud, one of the judges, dissenting from the report, so far as eonnected with the rifles. To Chas. Slotterbach, for telescopie rifle, a silver meda.l

ON FISHING TACKLE.

Messrs. Wilson & Evans, and R. Liddle & Co. made fine displays of fishing taekle, and everything appertaining to that business. Certificate of merit awarded to Messrs. Wilson & Evans.

Third Department.

ON CARRIAGES, WAGONS, ETC.

Committee:

J. L. OTTIGNON, R. S. EELLS, H. W. BYINGTON, J. W. FARREN.

The exhibition of carriages and wagons of California manufacture was a very small one, and it was a matter of surprise to the Committee that so large a branch of mechanics should be so sparingly represented.

The quality of the specimens exhibited, however, was plainly superior to those of Eastern manufacture, of which quite a large number were in the Fair.

Track Sulkey, exhibited by H. M. Bernard, of Sacramento, was of good style and workmanship, and a credit to any establishment. Awarded a second Premium.

Track Sulkey, exhibited by Albert Folsom, of San Francisco, was of superior style and finish, well braced, extra strong wheels and beautifully painted. Awarded a first premium.

Doctor's Phæton, exhibited by George P. Kimball & Co., San Francisco, has a great many conveniences for a doctor, such as pockets for medicines, instruments, etc. It is made to turn very short—which is a great convenience—and is a fine carriage for the use intended.

Pic-Nic Wagon, exhibited by George P. Kimball & Co. This vehicle has three seats, is covered with cloth, and for accommodation, strength and utility for the purpose intended cannot be surpassed. For both the above, awarded a diploma.

Milk Wagon, by Stein, Link & Scherb, of San Francisco. The wood-work of this wagon is of good design, the wheels strong and well made, and the iron-work, painting and trimming of the best quality. For the purpose intended, the vehicle is excellent. Awarded a diploma.

Side-Spring Top Buggy, by Wm. Larkins, is gotten up in good style, and is well finished in every particular.

Open Side-Spring Buggies, by Wm. Larkins, who exhibits two, possessing all the good qualities of the preceding vehicle. Awarded a special premium—silver medal.

Child's Wagon, by E. C. Brooks. This wagon is of good style and workmanship. The body is hung on four levers, attached to four spiral springs, which is a novel invention.

Pulley Evener, by William Saunders. This article is attached to a wagon-pole. The “evener” is about six feet long, with an iron pulley in the center, around which the chain plays to which the team is hitched. Not having had a practical test exhibited to them, the Committee presume that the “evener” is intended to prevent sudden jerks on the breasts of horses, and they recommend teamsters to use it.

Car Couplings, by E. T. Barlow, San Francisco. The coupling links are so arranged that, on two cars coming together, they will couple themselves without the aid of man, by which a great number of accidents can be avoided.

Car Switch, by E. T. Barlow, which does away with all friction, and is very simple and effective. The Committee commend these last two articles to the consideration of railroad companies throughout the State.

ON GRAINING, POLISHING AND SIGN PAINTING.

Committee:

G. D. WYMAN, CHARLES HOPPS, T. H. FLETCHER.

The imitations of rosewood were beautifully done.

The pieces exhibited as walnut imitations do not properly come under that head, being only staining and polishing on hard wood, showing the natural grain of the same. The polishing on natural wood was well done.

The glass sign painting was well done, but the Committee think the same signs were on exhibition last year.

ON GLASS SIGNS.

Committee:

H. G. BLOOMER, JOHN BREWSTER.

The Committee have examined the specimens on exhibition, and find that the two specimens by Daniel Winter are well done, and that one of them was done by an unusual process, termed "embossing on glass." The Committee award Daniel Winter a first premium.

AGRICULTURAL IMPLEMENTS AND MACHINERY.

Committee:

DANIEL L. PERKINS, J. A. HOBART.

The Committee, after examination, award as follows:

Seed Sower and Cultivator—For broadcast sowing, by D. & H. A. Winter.—Awarded a first premium.

Roller and Grain Drill, by L. Sikes, Santa Clara.—Awarded a second premium.

Seymour & Morgan's Combined Mower and Reaper, by J. D. Arthur & Son.—Certificate of merit. The same firm also made a fine exhibit of different kinds of plows.

Gang Plow, by L. Holloway, Gilroy, of superior workmanship.—Awarded a silver medal.

Portable Hay Press, by M. Doanes.—Awarded a second premium.

Hay Press, by E. F. Moek, Petaluma. This is a rotary, folding hay press. The model shows much ingenuity, but the Committee were unable to decide upon the merits of the press from an examination of the model alone.—Awarded a diploma.

Convertible Gang Plow, with its attachments, by T. Mahers, Watsonville. This is an excellent machine.—Awarded a diploma.

Gang Plow with Seed Sower and Harrow Combined, by Baker & Hamilton, Sacramento. No one being present to explain the machine, the Committee were unable to judge of its merits. This firm also exhibited two fine steel plows.

Feed Box (self-regulating) by Benjamin E. Harris. This arrangement for feeding horses exhibits much ingenuity, and the committee would judge it of practical utility.

Hay and Straw Cutter, by J. L. Chase. An excellent machine. No competition.

Grain Separator, by A. Hunter. The Committee have examined and experimented with this machine, and, finding it a valuable one for the purpose claimed, award a silver medal.

Mustard Cleaning Machine, by A. Hunter. The Committee have experimented with this machine, and find it valuable for the purpose intended.

Tree and Corn Cultivator, by Andrew Barton, Oak Knoll, Napa County. The Committee have made a careful examination of the manner in which the machine performs its work, and are of the opinion that it will do all that is claimed for it. Mr. Barton has applied for a patent. In view of its excellency, it is awarded a diploma.

ON CIDER AND WINE PRESSES.

Committee :

WM. GUNN,

C. F. JONES,

WM. H. HOOPER.

Cider Press, by John Denn, Sacramento. For being the most effective, combined with simplicity of construction, this press was awarded a first premium.

Cider Press, by E. W. Walton, Drytown.—Awarded a second premium.

Cider Press, by Joel Halstead, worthy of honorable mention.

ON WASHING MACHINES AND WRINGERS.

Committee :

V. S. W. PARKHURST.

C. F. JONES.

Four washing machines were entered for exhibition, viz., the "Union," "Challenge," "Economy," and "Rotary." The committee, after careful trials of the different machines, are of the opinion that the "Economy," by J. M. Horner & Co., can do more work, with less power and with less wear and tear to the clothes than the others.—Awarded a first premium.

To the "Union" washing machine, by J. L. Chase, is awarded a certificate of merit.

ON CABINET WORK.

Committee :

JOHN WIGMORE.

JOHN BRYANT.

Billiard Tables, exhibited by P. Liesenfelt. For beauty of design and excellency of construction and finish, the committee award a first premium.

Secretaries and Desks.—The committee award a first premium to Easton Bros., for secretaries exhibited by them.

Secretaries and Desks.—A. Conrad exhibited secretaries which were awarded a second premium.

Manzanita Cabinet and Cane Case, by J. M. Aitken. This cabinet and cane case, made of California wood, and exhibited for competition, were of most excellent workmanship. In view of the decided superiority of these articles, the committee awarded a special premium.

Barber's Chair, by Wm. M. Butler. For completeness of design and execution, the committee awarded a special premium.

Furniture, by Goodwin & Co. Lots 552, 583, 640, 278, and 366, of Eastern manufacture, were of excellent quality.

Furniture, by J. Pierce. The committee make special notice of lot 672, consisting of library suite, chamber do., and cabinet, all of black walnut, as being superior to all others of Eastern manufacture.

Sea Chest, by Capt. Edgar Wakeman. In the opinion of the committee, this chest showed considerable merit, as being the work of an amateur.

Willow Furniture, by Neuman Bros. To this exhibit, as being very handsome, and light, and tasteful in design, the committee awarded a certificate of honorable mention.

Inlaid Picture and Table, by Lazarus Castignio. These articles were finely designed, and the inlaid portions of the same beautifully executed.

Bed Lounge, by Jules Rolland, San Francisco. One bed lounge. This lounge is of extension make, arranged to close up in a very neat and compact manner.—Awarded a certificate of merit.

ON BILLIARD TABLES.

Committee :

R. N. VAN BRUNT. PAUL MORONEY. J. B. GUTHRIE.

The committee examined the cushions of the two billiard tables on exhibition, and report the cushions of the one owned by J. Strahle to be entitled to the premium.

ON DENTAL CHAIRS.

Committee :

J. B. BEERS. H. J. PAINE. J. B. JOHNSON.

The only chair exhibited was one made by Dr. Wm. M. Butler, of this city, which the committee think is well adapted to supply a great want in the profession. It is not only of superior workmanship and high finish, but, owing to an ingenious combination of mechanical appliances, a great diversity of movement is obtained. The working of the machinery is so easy that it requires but little more than an effort of the will on the part of the operator to place the patient in any position needed. Attached to the chair is a very elegant spittoon, for dental use, which, being balanced on a universal joint, always keeps a perpendicular position, notwithstanding the altering movements of the chair. Combined with this spittoon is an ingenious device for saving the waste filings and chippings of gold, which amount to a considerable sum per annum, especially where there is a large practice. As a California invention of great merit, awarded a silver medal.

ON UPHOLSTERY.

Committee :

J. O. ELDRIDGE. CHARLES C. VOLBERG. SAMUEL J. FLETCHER.

To Messrs. Goodwin & Co., for unique and original reception chair, upholstered in brown silk reps, as being the best domestic invention, and superior in all respects, awarded a silver medal.

To Messrs. J. Pierce & Co., for skill in workmanship in upholstered articles exhibited, awarded a first premium.

Upholstery Goods, by B. L. Soloman & Sons, San Francisco. This firm exhibited one glass case of upholstery goods, four chairs, and outside drapery. This collection of goods was of most superb style and quality.—Awarded a diploma.

ON LEATHER, HOSE, ETC.

Committee:

DAVID SCANNELL. JOHN C. AYRES. W. T. GARRATT.

Your committee report that they have examined the hose exhibited by M. M. Cook & Son. Being the only hose exhibited, the committee can make no comparison, but the material of that examined was of the best quality, and it was made in a superior manner. It was subjected to a strain of 160 pounds per square inch, and, from its appearance, it would have withstood more strain without fear of rupture. Its superior merit as a home manufactured article, in the opinion of the committee, entitles it to the award of a silver medal.

Horse Collars, by Wm. Trumbull, San Francisco. A lot of horse collars of California manufacture. These collars are of excellent workmanship and good material, and represent all the various styles and qualities used in California.—Awarded a certificate of merit.

Leather, by Kirby & Co, Santa Cruz. This firm exhibited two rolls sole leather and nine sides assorted leather, of their own manufacture, which, for all the qualities that constitute a good article, have no equal in this market. This leather was tanned in Santa Cruz County.—Awarded a silver medal.

Benicia Cement, by Wm. H. Martin, San Francisco. One barrel Benicia cement. This is a most excellent article of cement, considered equal, for all hydraulic purposes, to any imported.—Awarded a diploma.

Rosin and Turpentine, by Wm. G. Jones, San Francisco. Both the rosin and turpentine are of excellent quality, and were made near Dogtown, Butte County. Awarded a diploma.

Neatsfoot Oil, manufactured by Geo. S. Dana, Pacific Glue Factory, and exhibited by Cameron, Whittier & Co., agents. This manufacture has been carried on by the above-named party for the last five years; capacity of works, 8000 gallons of oil per annum, and 10,000 pounds of glue per month, the greater portion of which is exported to New York, for sale there. The quality of the oil is most excellent, while the glue is said to sell in New York at profitable prices.—Awarded a diploma.

Glue, exhibited by E. Kunitz, per Cameron, Whittier & Co., agents. This glue was made by the exhibitor, in Santa Cruz county. Its quality is excellent, it being preferred to Eastern made by most consumers. The works have been in operation about three years; their capacity is about 2,000 pounds per month. The glue finds a ready sale in this market, and is furnished at prices lower than a similar article can be imported.—Awarded a diploma.

Fourth Department.

WATCHES AND MATHEMATICAL INSTRUMENTS.

Committee :

WM. H. KNOWLTON, JAMES ANDERSON, B. R. NORTON.

The exhibition in this department, though not extensive, was still very interesting, the specimens showing a high degree of skillful workmanship and, in mechanism, an accuracy of detail that would do credit to older cities with larger population. Considering the recent settlement of California, and the drawbacks which those engaged in the finer arts and sciences labor under from the difficulty of getting proper materials, high cost of living, etc., the progress shown by this exhibition should be a matter of honest pride to our people. Judging from the success of this and other kindred departments, requiring the finest mechanical skill and ingenuity, the day is not far distant when we may depend upon our own resources in these particulars.

Watch by A. F. Mitchell. This watch, made in San Francisco, the committee examined with care, and found it to be a very creditable specimen of fine workmanship, showing a high order of mechanical skill. The committee deem the same worthy of a silver medal.

Surveyor's Compass and Transit, by John Roach. On examination, the committee found those instruments—made in San Francisco—very accurate in construction, displaying a high degree of excellence in workmanship and finish, and equal in all respects to any imported. The committee deem the same worthy of a silver medal.

ON ALBUM STEREOSCOPES.

Committee :

AUGUSTINE SNOW. W. BAUSMAN. H. C. BENNETT.

The only album stereoscope, or other instrument designed to answer the same purpose, on exhibition at the Fair, was that invented and exhibited by Mr. F. E. Mills. The instrument is designed to illustrate photograph albums, and in the opinion of the committee, is superior to any other used. It has what the inventor terms a "chromium," which consists of a glass prepared for the purpose of giving a life-like tint to the objects seen, instead of the usual ghastly hue produced by the ordinary stereoscopic instrument. As a California invention of great merit, it is awarded a silver medal.

ON GOLD PENS.

Committee :

WM. G. DOOLITTLE, R. N. VAN BRUNT.

The Committee report that, after a careful examination of the gold pens ex-

hibited by Messrs. Kenney and Goldman, they award those of Mr. Kenney, as being the best, a premium.

ON ELECTROTYPEING AND SILVER PLATING.

Committee:

JAMES MACKIN, O. B. OAKLEY, WM. H. T. CLARK.

The Committee in this department of the Exhibition report as follows:

R. F. Rocchelliccoli, San Francisco, had on exhibition a large quantity of electro-type plates and solid dies, for stamping leather, etc., and a beautiful silver plated figure of Flora supporting a lamp. Mr. Rocchelliccoli also had on exhibition German silver window and fender bars, of his own manufacture, which compared favorably with Eastern work.—Awarded a silver medal.

John Martel, San Francisco, exhibited some fine specimens of California manufactured plated wares, which were awarded a first premium.

Marwedel & Otto, San Francisco, exhibited a case of fine imported hardware of good workmanship. Also, electro-plated bell-levers and door-handles, of California workmanship.

Wm. P. Harrison, San Francisco, exhibited a very fine case of eleetrotyped printing plates, manufactured in this city, which articles deserve honorable mention.

Greaves & Smith, San Francisco, exhibited an improved soda fountain, manufactured by themselves. This machine appeared to be of excellent copper workmanship, and is apparently, what the manufacturers claim it to be, an improvement upon any soda fountain now in use.—Awarded a diploma.

ON CUTLERY.

Committee:

HENRY WHEELER, W. J. LELAND, A. W. REAY,
J. WEICKHART, F. A. HOLMAN, M. D.

The display of cutlery in this part of the exhibition, was very fine. The competition, however, being between Messrs. Will & Fink and M. Price, both of whom presented cutlery of California manufacture, of superior excellence and finish. The Committee award to Messrs. Will & Fink, San Francisco, for best exhibit of California made cutlery, a first premium.

To M. Price, San Francisco, for fine exhibit of California made cutlery, a second premium.

ABDOMINAL SUPPORTERS.

Committee:

WM. CARMAN, M. D., WASHINGTON AYRES, M. D.

The Committee on ladies' abdominal supporters, chest expanders and improved shoulders braces, report that although they are constrained to make the first award to the articles exhibited by Mrs. I. J. Howard, for their superior general advantages and adaptability to the purposes claimed, yet they would call attention to the specific qualities of lightness, superior mechanism and admirable adaptability of those exhibited by Mrs. Read.

Concealed Door Spring, exhibited by B. F. Barker, San Francisco. This inven-

tion appears to be a great improvement on the ordinary door springs, and their peculiar construction gives stediness and strength to the door in closing.—Awarded a diploma.

ON DENTISTRY AND DENTAL INSTRUMENTS.

Committee:

J. B. BEERS.

H. J. PAINE.

GEO. F. BENNETT.

The committee report the following as the result of their labors and awards :

On Dentistry.—To Drs. Knowles & Clarke, for the best set of artificial teeth, vulcanized upon a gold base ; also, for the best set of artificial teeth made upon English vulcanized rubber, a silver medal.

On Dentistry.—To Dr. H. H. Thrall, for the best set of artificial teeth, made upon American vulcanized rubber, a first premium.

On Dentistry.—To Dr. Wm. Calvert, for some very fine samples of artificial teeth, of his own manufacture, which the committee, having used them in their own practice, believe to be equal to Eastern make, or the imported article ; also, for samples of corundum wheels, tape, &c., manufactured by himself for dental purposes, a silver medal.

A number of samples of teeth, soldered upon a gold base, were exhibited by divers parties, some of them highly finished and creditable specimens of the art ; but those of merit the committee were satisfied were not wholly executed either in the laboratory of the exhibitors, or under their immediate supervision, thus giving no personal evidence either of professional skill or workmanship to the committee, who, therefore, do not feel justified in deciding upon their merits.

Extracting Teeth without pain.—To Dr. Edward Belle, for an ingenious apparatus for the application of cold to the teeth and gums, during the process of extraction, benumbing the nerves and periostium, so as to render the removal of teeth painless. The committee have witnessed the practical application of this process, and believe the machine an excellent one for the purpose designed, in all cases where it can be properly applied. They, therefore, recommend it as worthy of consideration.—Awarded a diploma.

ON GLASS MANUFACTURES.

White Flint Glass Ware, by the San Francisco Glass Works. One stand of fancy articles, in glass, of California manufacture. This company manufactures white flint glass ware only, and, from the excellence and cheapness of their wares, bid fair, in time, to drive out all foreign competition. This is the second glass company established on the Pacific coast, the other being the Pacific Glass Works' Company, at the Potrero, which confines its manufactures mostly to green and black glass ware, which it produces in large quantities. The San Francisco Glass Works have been in operation only a short time, during which, however, they have manufactured a great variety of white glass ware, of excellent quality.—Awarded a silver medal.

Ground and Cut Glass, by John Mallon & Co., San Francisco. One lot ground and cut glass. These specimens were of beautiful design and fine workmanship, and not to be excelled by anything of the kind ever imported.—Awarded a silver medal.

ON MUSICAL INSTRUMENTS.

Committee:

GEO. S. EVANS.
GEORGE KOPPITZ.

J. K. KENDALL.

JOHN L. CLARK.
J. W. J. PIERSON.

The display of musical Instruments was a very fine one, that portion of California manufacture comparing favorably with the best imported. For a new country, scarce-

ly fifteen years a State, the exhibition of her progress in the fine arts of civilization and population, as shown by this portion of the Fair, is worthy of great praise. This is more apparent when we consider the volatile character of her people, and the high price of skilled labor necessary in the manufacture of musical instruments, and the competition natural with those manufactured and imported from the Eastern States and Europe. As a general rule, articles manufactured in California have to be of surpassing excellence to compete successfully with imported articles, at a similar price. The case of musical instruments is no exception to the general rule.

Flutes, by George Pfaff, San Francisco, who exhibited a case containing a variety of flutes, of his own manufacture. These flutes were superior in tone and workmanship to any exhibited before. In addition to the usual keys and openings in imported flutes, Mr. Pfaff has added several others, which improves them to a considerable extent, as they enable the player to execute with greater ease than heretofore, very difficult passages, keys, and shakes. The instruments of Mr. Pfaff are bored in a more perfect manner, which also improves the sound.—Awarded a diploma.

Pianos, by Jacob Zech, San Francisco. The pianos of Mr. Zech were, in tone, action, and finish, considered superior to any exhibited before. These pianos, among other changes, have an improvement in the sounding-board, which adds greatly to the sweetness and volume of tone. There being no competition of California made pianos with those of Mr. Zech, the rules forbid award of a premium. In view, however, of their excellence of tone and finish, as compared with the other Pianos exhibited, the committee award to Mr. Zech a gold medal.

Square Pianos, of Wm. B. Bradbury's make, New York, exhibited by A. Kohler, agent, San Francisco, were the best imported pianos of their kind exhibited.—Awarded a first premium.

Grand Pianos, by Badger & Lindenberger, San Francisco. Chickering, of Boston, exhibited a very fine piano of this variety. Mr. Chickering was the only exhibitor of grand pianos.—Awarded a diploma.

Melodeons and Cabinet Organs, by Mason & Hamlin, exhibited by A. Kohler, agent.—Awarded a first premium.

Accordeons, of California manufacture, exhibited by C. C. Keene, San Francisco. These instruments were manufactured by himself, and were superior to the imported. Awarded a first premium.

ON ESSENTIAL OIL EXTRACTOR.

Committee:

I. ROWELL, M. D., R. BEVERLY COLE, M. D., WM. H. KEITH.

Essential Oil Extractor, exhibited by V. Squarza, patentee. This is a machine of California invention, well worthy of consideration, from the fact that it extracts the oil from lemons, oranges and other fruits, in great purity and without injury to the fruit.

The great demand for these oils will, no doubt, be much more promptly and cheaply met when this invention shall have found its way into general use. An inspection of this machine exhibits distinctly the thoroughness of Mr. Squarza's knowledge of the subject and his great ingenuity in its practical application. This being undeniably a Californian invention of great promise, the Committee conceive it worthy, in an eminent degree, of special consideration.

DESCRIPTION OF OIL EXTRACTOR.—The body or frame work of this machine consists of several compartments, the one within another, with spaces between. These compartments may be described as hexagonal boxes, equal in length but differing in diameter. The whole is arranged to be suspended on pivots, and rotated by a power which operates upon an axis perpendicular to the hexagonal sides of the machine. The innermost and smallest of the two boxes or compartments has an orifice at its smaller end, by which the fruit to be used is passed into the machine by means of a feeding pipe. The diameter of the first and interior box increases towards the extremity opposite that where the fruit enters, so that when the concentric, hexagonal boxes are rotated, (being hung upon a horizontal axis), there will be a gradual downward inclination of the under-side of the box

from the end where the fruit is admitted to the opposite end. This inclination is sufficient to cause the fruit to find its way—as the machine is slowly rotated—to the larger end, where there is an aperture opening into the *second* box or compartment, exterior to the first. This second compartment has its greatest diameter at the end opposite that at which it receives the fruit from the first and, consequently, at the end where the first compartment has its *least* diameter. Thus, the fruit, passing from the larger end of the innermost box into the smaller end of the second one, is carried by the inclination of the latter, towards the larger end, being the same from which it started in the first. Here it finds its way through another aperture into the smaller end of the third and outer compartment, which, in its turn, enlarges in the opposite direction, causing the fruit to roll once more towards the larger end. Each of the boxes or compartments has its inner side covered with projecting steel points, set at regular intervals. By means of a double cover to the boxes, the steel points being set in the outer cover and projecting through appertures in the inner one, the length to which the points protrude on the inside of the boxes can be increased or diminished at pleasure, being regulated by screws, which separate or draw together the double covers, as may be desired. The steel points are designed to perforate the rind of the fruit and thoroughly break up the cells containing the essential oil, which is thus set free. The mode in which the machine operates is as follows: The fruit passing into the innermost compartment, while the machine is slowly revolving, rolls over the steel points and gradually reaches the larger end, where it passes into the sacred compartment and then, by a reverse process reaches the third, where it again rolls to the larger end. Here there is an arrangement of small boxes, opening directly opposite a passage into the inner compartment, by which the fruit is caught and thrown back into the said inner compartment, so that the process can be repeated as often as may be necessary. The motion of the fruit over the steel points perforate the rind throughout its whole extent, and more thoroughly disintegrates the cells than can be done by any other process in use. When it is supposed that the fruit has been long enough in the machine to have all the essential oil extracted, a sliding door near the larger end of the outer box or compartment is opened, through which the fruit gradually falls into a receptacle prepared for it.—Awarded a silver medal.

ON HAIR PREPARATIONS, DENTRIFICE, ETC.

Committee:

DR. L. LANSZWEERT,

ROYAL FISK.

The great variety of the articles exhibited in this department of the Fair renders it almost impossible for the Committee to report at length on the merits claimed for the different articles by their exhibitors. They are, therefore, briefly mentioned, and those noticed beyond a simple enumeration in all cases have peculiar merits which, in the opinion of the Committee, entitle them to that distinction.

Hair Rejuvenator.—Samples exhibited by A. Grimm.—Awarded a diploma.

Perfumery.—Sample exhibited by T. W. Van Zandt. Also, by J. F. Fngazi, who exhibited a very large and fine assortment of his own manufacture. The cologne water, hair restorative, philocome, marrow pomade and hair dye were of most excellent quality, and, in the opinion of the Committee, equal, if not superior, to imported articles. Analyses made by the Committee show the ingredients in the hair restorative to be of a harmless nature, while the testimonials of respectable parties who have used the article, bear witness to its good effects.—Awarded a silver medal.

Spring Flower Dentrifice.—Samples exhibited by T. A. W. Lundborg. This article, on analysis by the Committee, showed no injurious but many valuable ingredients for the purpose intended. In the opinion of the Committee, this preparation surpasses any known article of dentrifice in this market, and they would recommend it accordingly.—Awarded a silver medal.

Cream of Tartar in Crystals.—Samples exhibited by E. Vache, Los Angeles. This article was of most excellent quality, but the exhibitor would have promoted his interests by exhibiting samples prepared for family use, with a description of

its manufacture and cost, and the practicability of competing with the imported article. As the consumption of this article is very large in this State, it is much to be regretted that information so important and interesting to the people was not furnished.

Yeast Powders.—Samples of Curtis' yeast powders exhibited by F. Williams. As this was the only sample of yeast powders on exhibition, the Committee were not able to test its merits by comparison with others. The Committee, however, were of the opinion that the article exhibited would, on trial, stand well for preference.—Awarded a diploma.

Preserved Milk.—Samples exhibited by A. Besson. This article was, in the opinion of the Committee, superior to any imported, both for freshness and delicacy of flavor, the latter being very difficult to retain through the usual process of manufacture. Although the only article of its kind on exhibition, the Committee would, in view of its excellence and purity (as per analysis), recommend it for premium.—Awarded a silver medal.

Prepared Mustard.—Samples of German and French mustard exhibited by Zwick and Loeven. In the opinion of the Committee, these samples of mustard—the "Dusseldorfer" and the "Moutard de Bordeaux," are well prepared, the latter, apparently, being somewhat weaker than the imported article.

Warren's Lustrina, sample of this article exhibited by C. F. Boshen. This preparation, intended for cleaning and polishing cutlery, tin, Britannia ware, etc., was tested by the Committee, who found the article well adapted, as claimed, but, by a finer pulverization of some of the ingredients the quality would be improved.

fifth Department.

ON WINES, LIQUORS, AND MALT BEVERAGES.

The extent of the grape culture in California, at the present time, is said to exceed that of all the rest of the States combined; and the production of wine and brandy, especially that of the former, is increasing so rapidly that it bids fair soon to drive all foreign competition from this market. In almost all parts of the State the soil is suitable for the successful cultivation of the vine, while, for the maturing of the fruit and making of wine, the climate has no superior.

Under the auspices of the Catholic missionaries who first settled in California, the vine and olives of Spain were introduced at the various missions, and the former soon became a common fruit throughout the country, wherever the white man made his home. Comparatively large quantities of wine and brandy were made at the various missions, but the demand being limited to the domestic consumption, no encouragement, as in commercial countries, stimulated the production beyond the ordinary wants of the coast. With the discovery of gold in 1848, the great influx of white population rapidly increased the demand for wine, and enhanced its value as a product so that the vineyards then planted became exceedingly profitable to their owners, who, thus encouraged, engaged still more largely in the cultivation of the grape. As the wine won favor among consumers, the new settlers in the State became aware of its great value as a product, and soon citizens, natives of all countries, were interested in grape culture, until, at the present time, the vines producing fruit number many millions, soon to be doubled by others now planted, but not yet in a bearing state. Next to the raising of small grain for food purposes, wine-making is now the most profitable agricultural resource we possess, and unless a large accession of population, engaged in other agricultural pursuits, should soon

be made, the increase in the number of bearing vines and their fruit, will make it take the lead among the products of the State. Under these circumstances, the exportation of wines and brandies to the Atlantic States, and other markets, must eventually become very large, and it is expected that the quality of both shall be of such excellence and purity as to defy competition from abroad.

The samples of wines and brandies in the Fair were by no means of that extent that the importance of the interest called for, and it is to be hoped that, when another similar opportunity offers, wine makers, generally, will find it to their interest to make such a display of their vintages to the public as shall properly represent so vast and growing an interest of the State. To make up, however, as it were, for the lack in the number of samples, the wines exhibited this year were, with very few exceptions, superior in quality, as a collection, to any before exhibited.

ON WINES, CORDIALS, ETC.

Committee:

J. J. HARKNESS, S. P. CHRISTY, JAMES IRWIN.

Tokay Wine, exhibited by John Sweet, was awarded a first premium.

Port Wine, exhibited by James McCaffrey, was awarded a first premium.

White Wine, exhibited by the "United Anaheim Association,"—Awarded a first premium.

Red Wine, exhibited by Isaac B——, was awarded a first premium.

Pure Juice of the Grape, exhibited by S. Brannan, was awarded a first premium.

Madeira Wine, exhibited by Mathew Keller, was awarded a first premium.

Sherry Wine, exhibited by Mathew Keller, was awarded a first premium.

Angelica Wine, exhibited by B. D. Wilson & Son, was awarded a first premium.

Burgundy Wine, exhibited by B. D. Wilson & Son, was awarded a first premium.

Wine Bitters, exhibited by Mathew Keller, was awarded a first premium.

Whisky Bitters, exhibited by I. D. Thompson, was awarded a first premium.

California Brandy, by B. D. Wilson & Son.—Awarded a first premium.

In awarding premiums to the above, the Committee would especially recommend the producer of port wine for furnishing a remarkably superior quality of wine.

ON LIQUORS, ALE, BEER, AND CIDER.

Committee:

S. P. CHRISTIE, G. J. BYRNE, JAMES IRWIN, P. J. O'CONNOR.

The Committee, having examined the various samples of Bourbon and rye whiskies exhibited in the Fair, award the first premium to I. D. Thompson, for the best Bourbon whisky, known as the "lily" brand.

The Committee also award a first premium to J. Sajous, for the best California brewed "half-and-half."

ON COMPOUNDS AND CALIFORNIA INVENTIONS.

Special Committee:

I. ROWELL, M. D., R. BEVERLY COLE, M. D., WM. H. KEITH.

The liquors, punches, tonics, bitters, cordials, &c., prepared by V. Squarza, are, without exception, the finest article in their line the Committee have ever examined.

All of Mr. Squarza's preparations have these great merits over other compounds of a similar character :

- 1st. That none but the best and purest liquors are used.
- 2d. That no sugar, syrup, or sweetening principle is ever used, except that obtained by the incineration of sweet fruits, hence the nutricious principles contained in the fruits are also imparted to the "punches."
- 3d. That the flavoring materials are also obtained by macerating the various fruits, flowers, plants, and herbs which contain them, instead of using the ordinary expressed essential oils.

The great skill of Mr. Squarza consists in his ability to blend harmoniously, and in due proportion, the various materials used, so that there are none wanting and none in excess. Some of his preparations are medicinal, and deserve especial and favorable mention.

"*Selene*," a cordial, as its name would indicate, is a ladies' drink, and, no doubt, will be found as beneficial as it is agreeable.

"*Aurora*" is a most delightful tonic bitter, infinitely more agreeable and healthy than those villainous compounds usually taken as an appetizer in the morning.

The "*Raspberry Cordial*" contains the astringent principle of that plant in a marked degree, while it has all the agreeable flavor of the fresh, ripe fruit. It is an excellent article for the summer complaints of children.

The "*Tea*," "*Coffee*," "*Cocoa*," "*Anti-Divorce*," "*Ladies' Pleasure*," "*Ladies' Tears*," and "*Strawberry Cordial*" are all most delightful beverages, from which it would be difficult to select one in preference to another.

The harmonious blending of colors please the eye ; the scientific distillation and admixture of the perfumes of sweet flowers please the sense of smell ; and the harmonized sounds of music fall upon the ear and delight the sense of hearing. The same law holds good in regard to a combination of different flavors to please the palate, and Mr. Squarza has, doubtless, struck an octave higher than any one else in his playing upon the "organ of taste." The Committee, in view of these several facts, feel it incumbent upon them to commend the claim of these preparations exhibited by Mr. V. Squarza, and, believing them to be the best articles of their kind extant, have no hesitation in recommending them for the highest prize.—Awarded a diploma.

ON SILK WORMS AND THE CULTURE OF SILK.

Committee :

HENRY F. WILLIAMS,

SAMUEL TYLER.

The Committee on these subjects have endeavored to perform the duty designated, but regret their inability to do full justice to the important trust confided to them.

Their especial attention was called to the exhibition of silk-worms and cocoons, by L. Prevost of San José, who has, in the opinion of the Committee, most successfully demonstrated that California is one of the best, if not the very best silk producing country in the world. They have learned to their own satisfaction, not only from those who know something of Mr. Prevost's operations in this line, but, also, from personal observation during a visit to his cocoonery in San José, that Mr. Prevost is justly deserving of the highest premium the Institute can award him, for the commendable zeal and perseverance he has exhibited under the greatest difficulties, in successfully inaugurating this new branch of industry in our State. The demand, both for silk and silk-worm eggs, is so extensive and constantly increasing, that the business cannot be overdone, but its successful prosecution must, in time, give employment to many thousands of our people, with a net profit of millions of dollars annually.

Mr. Prevost's simple narrative of his early efforts and drawbacks was exceedingly interesting to the Committee, and they induced him to commit to writing some of the leading facts, together with some remarks by Mr. Hentsch, which are hereby submitted, in the hope that they may not be lost or forgotten.

The Committee deem themselves not over sanguine of the great results to flow

from the introduction of this important branch of industry into our State, when they hope and believe the day is not far distant when a gratified people will, through their Legislature, offer some public recognition of the services rendered by Mr. Prevost.—Awarded a gold medal.

FACTS ON SILK IN CALIFORNIA.—BY L. PREVOST.

After I had passed a summer in California, I came to the conclusion that it was one of the very best countries in the world for raising silk, as well as wine, etc., etc., but the difficulty was to obtain, first, mulberry trees, and, afterwards, silk-worm eggs. In 1863 or '64. I had occasion to meet with Mr. Henry Hentsch, who had the same opinion of our beautiful climate, and its adaptability for silk cultivation, and he, himself, began a conversation on that important subject. From that conversation was born the culture of silk in California. Mr. Hentsch imported the mulberry seed from France, from which I raised a number of fine mulberry trees. Mr. Hentsch was informed as soon as the trees were of some size, and he made arrangements to import silk-worm eggs from China. They arrived here dead—it was impossible to hatch one of them. The following year he imported another lot from the same place, and with the same result. After this second attempt I was a little discouraged, finding that it was impossible to import the eggs in good condition, and expecting to have no use for my mulberry trees, I had the most of them destroyed, keeping only a few.

The third year, Mr. Hentsch imported eggs again from the same place, and at the same time, from France. I was then very sorry to have destroyed so many of my mulberry trees, as the eggs from France proved to be in good condition, and hatched out very well. At that time I had a friend here, Mr. Miller, who was a competent silk cultivator, to whom I showed the eggs. He pronounced them good, and also agreed, for the first time, to help me, which he did. The worms did well, and produced fine cocoons of silk of the first quality, as I can prove by certificates from the two highest silk societies in Europe, to whom silk and silk cocoons had been sent to be tested.

Up to this time we have not been able to discover any indications of disease, which is most extraordinary; it must be the good influence of the climate of California operating as we expected. As I had no other room for the purpose, I have been obliged to raise the worms in a green house, which was extremely hot in daytime, and nearly freezing at night. Under such unfavorable circumstances, not one worm would have lived in Europe. Now, any thinking man can judge what success we might reasonably expect if we had a proper room in which to raise them.

The first year I made silk was in 1860. I sent bouquets of cocoons and silk to about every fair all over our State; they attracted the attention of visitors, but I received no encouragement. On the contrary, I heard many say that this culture could not be pursued profitably in California, on account of the *high price of labor*. I was aware of the apparent truth of this before I attempted the production of silk, but I thought for this kind of labor Chinese might be employed, who are used to the work, and, besides that, I knew that the price for *buying* three or four acres of land here does not exceed the price of *renting one acre* in Europe, where silk is raised in large quantities. This advantage, I expected, would more than compensate for the difference between the price of labor in Europe, and Chinese labor here, because the silk grower in Europe has to deduct from his profits the rent of the land every year. But the question of labor is now fully settled, and silk can be raised in California with great profit. Calculating on the great superiority of our climate, I thought to try to take advantage of it, and I have succeeded in simplifying that culture even beyond my expectation. One man here can raise and take care of as many silk-worms as eight men can do in Europe. As my mode of culture is adapted to the climate of California, I propose to call it *California Silk Culture*. It could by no means be employed either in France or Italy, where they have rains during the season of feeding, but might be used in any place where there is a climate similar to this.

The culture of silk in California is so simple that any one may understand it. It is easy work, and can be done by quite young persons, either male or female; the ladies, therefore, may have the pleasure of raising their own silk.

It will be a great pleasure to me to have contributed something towards the retention in our State of the millions of dollars that are paid out for the single importation of silk. Not only may we raise silk for our own consumption, but we can, in California, raise silk for the world, and export it. This article must increase in value; this year it is increased twenty-five per cent in price in Europe. It is an

article in which we need not fear competition ; we need not be afraid to see our neighbor raising it, because, if nearly everybody was raising it all over the State, it would not lower the price two cents per pound. This year, when the price of fruits is exceedingly low, allows us to show the advantage of the mulberry over fruit trees as the fruit must all be consumed within a certain time or it is lost, which is very far from being the case with the silk.

I have been engaged in my experiments in California silk culture three years, and this year raised over one hundred thousand cocoons.

Several gentlemen have made large plantations, so as to pursue this business hereafter on a larger scale. Among them I can name Mr. A. Packard, and also Mr. Q. Goux, of Santa Barbara, who have planted three thousand mulberry trees, and Mr. Glessing of San Joaquin Valley, whose plantation dates from last year.

Besides what may be done with the silk, we have a constant demand for eggs by the European culturists, as there they have the disease, and to insure a crop have to get their eggs from countries where the disease does not prevail. By not using sound eggs their crop is very much exposed ; but, besides all that, and all they can do, in their best years their losses are generally twenty-five per cent, sometimes fifty per cent, and, in very bad years, as high as seventy-five per cent. Here we suffer none of these losses, and, as there is nothing to cause disease, every worm makes a cocoon. This also merits some reflection and consideration in favor of the superiority of our climate. It would be quite too long to enumerate everything in our favor, but I cannot help remarking that the principal point is that the mulberry tree grows here most luxuriantly, and I believe, also, that our virgin soil produces leaves of the best quality. In order that every one may be able to raise his own mulberry trees, I have published a treatise on the culture of that tree, both by seeds and cuttings, in the "California Farmer," and also in the French paper. It is calculated that an ounce of silk worm eggs contains forty thousand ; I have produced several millions of eggs this season, and they were all sold at the rate of ten dollars per ounce, to be sent to France, and those for years to come are engaged for the same house. If I had them by hundreds of pounds I could sell them immediately. The eggs are in great demand, also, for Mexico ; I had an order for that country for 500 ounes, but, of course, was unable to fill it. The largest order I had was for one hundred pounds, for Italy, and when I received that order I had only three ounes to sell. All this shows that in the future, besides supplying a large export demand for silk, we will also have to export largely of eggs.

The variety of mulberry to cultivate to obtain the best quality of silk is the white mulberry (*morus alba*), and its varieties, particularly the *moretti*. As to the *multi-caulis*, I would recommend it only when the worms are very young, but not afterwards. The feeding of the worms continues only thirty-two or thirty-four days when they make their cocoons, and twelve days after that they come out butterflies, and lay their eggs for the following year. They have to be kept in a cool, dry cellar to prevent them from hatching.

Each female is expected to lay about three hundred eggs. Three hundred good cocoons weigh about one pound, and an ounce of eggs can produce one hundred and sixty-five pounds of cocoons ; twenty-eight ounces of selected cocoons give two ounces of eggs.

REMARKS OF MR. HENRY HENTSCH.

The memorandum of Mr. Prevost contains valuable and correct information about California silk culture. The main point on which the report must attract the attention of the community is this, that California has one of the best, if not the very best climate in the world for producing silk successfully, on account of the absence of rains and storms during the months of May, June, and July, which, prevailing in Europe, kill millions and millions of silk-worms annually.

The second point is, that it does not require any capital—or, at least, very little—merely the purchase of the mulberry trees, which may be planted around the farms, cottages, and country residences.

The shade of the mulberry tree is as good as the shade of the cotton-wood tree, and the fruit is very good for poultry. When the trees have grown up, the children and women may start in the silk trade, as it requires only the labor of gathering leaves to feed the worms, and that occupation takes only six weeks. It would be useless to go into further detail, as the practice is ten times more valuable than the theory. There are in California a great number of Italians and Frenchmen who

understand the silk raising business, and it will be very easy to have information and directions when wanted.

The point to be first attended to is the planting of mulberry trees, which involves but a trifling expense for the present, and may prove of very great value in a few years.

ON AGRICULTURAL AND HORTICULTURAL PRODUCTS.

Committee:

J. A. HOBART,

C. W. HAM.

The following awards were made by the Committee:

D. E. Hough, Oakland, for the largest display of fruits, consisting of fifty-three varieties of apples and one hundred and eight varieties of pears, and a variety of plums, crab apples, etc.—Awarded a diploma.

Dan. L. Perkins, Oakland, for his fine assortment of California grown seeds and excellent display of fruit.—Awarded a silver medal.

F. Despois, for his exhibition of thirty-three varieties of fine grapes.—Awarded a first premium.

Matthew Keller, for exhibition of four bales California grown tobacco and three cotton plants.—Awarded a certificate of merit. Mr. Keller is an applicant for the State bounty of \$1,000 offered for the first one hundred bales of cotton grown in California by one person, and the samples exhibited were from a patch of 10 acres grown by him near Los Angelos. Mr. Keller was awarded a gold medal by the Institute for his enterprise in striving to secure the above named bounty from the State.

Jared Runyon, Sacramento River Ranch, exhibited five plates of apples and eleven plates of pears of magnificent appearance.

F. Brown, Onisbo, Saeramento river, exhibited twenty-five Gloria Mundi apples, the whole weighing thirty pounds.

B. N. Bugbey, Natoma Valley, El Dorado County, for a box of California raisins, cured in 1864.—Awarded a diploma. The Exhibition being held in August, was too early in the season to admit of Mr. Bugbey exhibiting raisins of this year's curing. The sample exhibited of 1864 curing was in good order, and showed by its admirable keeping qualities that California might, not only supply the home demand, but could produce large quantities for export, whenever circumstances shall warrant an extension of the business in that direction. Mr. Bugbey will make some 10,000 pounds of raisins this season.

R. B. Woodward, exhibits five bunches of Blaek Hamburg grapes, of superior excellence, grown under glass, at the Mission Dolores, and twenty-nine plates of pears, grown at Oak Knoll, Napa County.

Simeon Statas, Sacramento river, for a fine display of hops on one vine, was awarded a certificate of merit.

Daniel Flint, Saeramento, exhibited three extraordinarily large bunches of hop flowers.

J. G. Dow, Russian River Valley, exhibited eorn stalks fourteen feet high, and loaded with ears of eorn.

C. H. F. Hildebrand, exhibited rhubarb, lettuce and potatoes grown from imported seed.

C. W. Weston, Pacific Market, exhibited a basket of samples of fruit, beautifully arranged.

E. F. Peck, Watsonville, Santa Cruz County, and *J. Runyon*, Saeramento river, exhibited enormous squashes, grown by them.

F. Ferris, San Lorenzo, Alameda County, exhibited five mammoth cueumbers.

Jewell's Vermont Dairy exhibited two cheeses of fine appearance.

E. R. Thurber, Solano County, exhibited two bunches of flame-colored tokay grapes of very superior appearance.

ON FLOWERS.

Committee:

MRS. J. G. HARDING,

THOMAS BENNETT.

The following-named parties were awarded certificates of merit for collections of flowers and plants displayed during the Fair:

Mrs. Richards, for keeping a table supplied with hand-bouquets.

Mr. John Ross, an amateur florist of Oakland, for the best collection of cacti.

Messrs. Collie & Stewart, for a fine and continuous display, during the Fair, of about two hundred species of plants.

Mr. James Lick, for a fine show of twenty-five varieties of China Aster.—Awarded a diploma.

P. Nolan, Belle View Nursery, Oakland, for a fine display of Gladioti, and a number of rare cut flowers.

Col. Walker, Golden Gate Nursery, for a very great variety of rare plants, bouquets wreaths, emblems and cut flowers.

ON GROCERIES.

Committee:

MRS. HENRY L. DAVIS,

R. E. ROWLAND.

In this department are some of the most important manufactures of the Pacific coast, which give employment to many hundreds of persons, and thereby cause the retention of a large amount of capital, and its profit, in our midst. Prominent among these is the refining of raw sugars by the San Francisco and Pacific Sugar Company, which is capable of supplying the entire demand for refined sugars on the Pacific coast of the United States. In this refinery sixty-five thousand pounds of raw sugar are used daily, the result of which is some sixty thousand pounds of refined sugar, of different grades, which have no superior in quality from any refinery in the world. Besides the refined sugar, there is produced a large amount of syrup, which, in this market, is preferred to any imported. In the various departments of this refinery, there are two hundred and twenty-five men employed. The Bay Sugar Refinery Company of this city made no exhibit, but it is known to produce large quantities of refined sugars and syrup. All the raw sugars are imported, but it is to be hoped that, in time, California will supply the sugar required, as she possesses a soil and climate said to be well adapted for the successful raising of it. In this particular there seems to have been exhibited an apathy remarkable for so energetic and enterprising a people, but few trials having been made, and those mostly by inexperienced persons, whose labors, not being directed aright, have thus been thrown away. Could the demand for raw sugars for domestic consumption be supplied by our own people, additional employment would be given to many thousands of persons, while, between the value of the sugar produced, and the enhanced value of the lands producing it, many millions of taxable property would be added to the assessment rolls of the State. Certainly, in view of the great results to be obtained, it would seem to be the imperative duty of the various agricultural societies, that have from time to time drawn support from the State treasury, to make some persistent, practical efforts to inaugurate the raising of sugar. Where the fig, orange, lemon, olive, and almond thrive without protection, the successful culture of the sugar cane may reasonably be hoped for. It is by the success of such great agricultural products that the permanent prosperity of the State will be secured, as importing and manufacturing interests alone are liable to great and injurious depressions, which check and dishearten the energies of a people. Among other important manufacturing interests is that of manufacturing adamantine candles, which is now being engaged in by Wm. H. Scoville & Co., of this city, who have exhibited at the Fair very good specimens of their own make. The large extent of tunnel and quartz mining throughout this State and adjacent territory which get their supplies

of candles through this city from the Atlantic States, would seem to afford a field of enterprise tempting and lucrative enough for capital to largely engage in. Considerable difficulties, however, have existed to prevent the successful inauguration of this branch of manufacture up to the present time, but it is to be hoped that better opportunities will now occur for its successful prosecution. One great drawback to the extensive manufacture of candles in this State has been the scarcity of lard, our agricultural population not having given the raising of swine that prominence in their business which it intrinsically deserves. While, on the one hand, they declaimed about hard times in their business—which undoubtedly at times was true—on their own part they have not striven to produce many articles which they might have done, the supplying of which would have lessened the drain of treasure that is constantly going on to pay for importations. Competent parties, familiar with the importation of candles at this port, estimate the amount at over half a million of dollars annually. When to this is added the consumption of lard oil for many purposes, and of which over 3,000 barrels have, within the last year, been transferred (by the admixture of mutton tallow here) into an article termed lard, and the large amounts of pork, bacon, and lard imported, it swells the total that could, as well as not, be saved by farmers to the State, to from \$1,200,000 to \$1,500,000 per annum. It is not within the province of this Committee to go outside of the sphere of duties assigned them in making their report, but they trust that the suggestions made above may be well considered, and thereby prove of service. Another production, which by its excellence has driven the imported articles out of the market, is the manufacture of vermicelli, maccaroni, and kindred edible pastes, all of which are manufactured in this city.

Extract of Coffee exhibited by Zwick & Lowen, of San Francisco.

Macaroni, Vermicelli and Italian Pastes, exhibited by Brignardello, Machieavello & Co, San Francisco. The articles exhibited were of most excellent quality, and the committee awarded the exhibitors a silver medal.

Ground Coffee and Spices, in glass and paper, exhibited by J. Strelitz, San Francisco. A very fine assortment of excellent quality.

Ground Coffee and Spices, exhibited by C. Bernard, San Francisco, which for superiority were awarded a first premium.

Sugars and Syrups, exhibited by the San Francisco & Pacific Sugar Refining Co. This company made a splendid exhibit of refined sugars and syrups of their manufacture, which were awarded a silver medal.

Sauce for Meats, exhibited by P. B. Comins, which was a fine article. Awarded a diploma.

Bacon and Hams, exhibited by Wm. Diek & Co. These smoked meats were of fine appearance and most excellent flavor, equal, in the opinion of the committee, to any heretofore exhibited. Awarded a diploma.

Fine Salt, exhibited by Plummer & Co, San Francisco. Awarded a first premium.

Dairy and Table Salt, exhibited by A. B. Winegar, agent, Union Salt Works, San Francisco. Awarded a second premium.

Adamantine Candles, exhibited by Wm H. Seoville & Co., San Francisco. Awarded a silver medal.

Soap and Soap Powders, exhibited by the Standard Soap Company, San Francisco. This Company exhibited samples of excellent soap for family, laundry and toilet uses. They also exhibited a concentrated erosive washing powder, which, by the addition of water, forms at once an excellent quality of soft soap. Awarded a first premium.

Soft Soap, by Miss Maggie Conghlin, San Francisco, one tub soft soap, home-made from table scraps—a most excellent article of its kind. Awarded a certificate of merit.

ON MATCHES.

Committee :

ANDREW S. CHURCH, JOSHUA HENDY, GEO. S. DICKEY.

This portion of the Fair was well represented by the "Excelsior," "California," and "Eureka" Match Companies, all indicating commendable progress in this branch of California industry.

The committee found about equal merit in the articles exhibited by each of the above competitors, but think the "Eureka" company justly entitled to the first premium in this division for variety and finish. Awarded a first premium.

ON CORDAGE.

The only cordage manufactory on this coast is the San Francisco Cordage Manufacturing Co., Potrero, TUBBS & Co., agents. The samples exhibited (some seventeen in number) were an assortment of the different kinds made by this company for sale, comprising grades of every description, ranging from the lightest hay-rope to the heaviest hawsers. The cordage of this company is superior in some qualities to the best imported, and is steadily driving out all competitors from this market. The company commenced business in 1856, cordage being one of the pioneer manufactures of California. Since that time the company has steadily increased the quantity of its manufactures, constantly adopting all improvements in cordage machinery as they became known, until now the works are equal in extent to any in the United States. This company possesses two important advantages over Eastern manufacturers for the market, *i. e.*, a closer proximity to the sources of supply of the raw material, and the advantage of manufacturing it into such sizes of cordage as the market may at that time require.

The annual consumption of cordage of all kinds in this market is about 1,300 tons, seven-eighths of which is made at the works at the Potrero, where 1,200 tons of hemp are consumed yearly. The company, with their present running machinery, can manufacture 2,000 tons of hemp per annum, and have additional machinery on hand for contingencies, and steam-power to run it. During the past year the manufacturing capacity of the works has been largely increased, a new engine and boiler of 150-horse power being substituted in place of the one formerly used of half that power. The walk has been extended to 1,500 feet in length—the largest in the United States. Single lengths of rope, 1,000 feet long, have been made, and the company can manufacture, with present facilities, 1,200 feet in length, and, with but little additional expense, make them still longer. A hawser, fourteen inches in circumference, has been made at the works, which are competent to make others up to twenty inches in circumference, if required. Fifty men are constantly employed at these works, about one-half the number being Chinamen, who are engaged in light work, such as in the Atlantic States is done by boys and girls. No substitute for Manilla hemp is grown in the State, although it is reported that a wild vine, which grows luxuriantly near Santa Cruz, furnishes a staple strong and fine like silk, the fibre being very long.

For superior quality of cordage, exhibited by the San Francisco Cordage Company, the Committee award a silver medal.

ON PAPER, BOOK-BINDING, PRINTING, ETC.

Committee :

FRANK EASTMAN, A. J. CORTES, WILLIAM ALLEN.

Report the following as the result of their labors:—The display in this department was not so extensive as the committee wished, but was very interesting, as showing the ability of manufacturers to produce within this State everything within the line of paper (excepting writing or sized paper,) that is needed on the Pacific coast. The importance of paper manufacturing

in this State alone can be understood when it is stated that the present consumption of paper, for all purposes, in California, equals half a million of dollars per annum. Although struggling under many drawbacks, such as increased cost of imported material, transportation and labor, our manufactures have already driven some kinds of imported paper from the market, thus giving employment to many and retaining money in the State.

Paper.—To S. P. Taylor, proprietor of the Pioneer Paper Mills, for exhibition of largest assortment of different kinds of printing and wrapping paper, and straw boards of excellent quality—awarded a special premium of a silver medal.

Paper.—To the San Lorenzo Paper Mills, Wm. P. Harrison, Agent, for exhibition of same articles, equal in quality, but not of so many varieties, a special premium diploma.

Book-Binding.—To George B. Hitchcock, for exhibition of a case of blank books of San Francisco manufacture, they being excellent in quality, style of binding and ruling—awarded a silver medal.

This report was unanimous, with the exception of that portion relating to book-binding, which was signed by Mr. Eastman, but dissented from by the other members of the committee on the ground that the books "were not bound expressly for exhibition." These members of the committee, therefore, did not consider the books a fit subject for a prize or for essential merit, but regard them "simply as a fair sample of a style of binding, ruling and finishing, but not entitled to a special award or premium.

Newspaper Printing, by Dewey & Co., San Francisco.—For specimens of newspaper printing—bound volumes of the "Mining and Scientific Press," awarded a diploma.

Sixth Department.

ON WOOLEN MANUFACTURES.

The manufacture of woolen goods is one of the large mechanical interests of California. Removed so far from a manufacturing market, for many years woolen goods, extensively worn by all classes of population, brought high prices, and contributed largely to the flow of precious metal that yearly left the country to pay for imports. By a strange anomaly, California, while importing woolen goods at high prices, at the same time exported large quantities of excellent wool suitable for the needed manufactures. Between the two the wool-growing interest was depressed, and, as far as woolen goods were concerned, the country drained of money.

The opening for the manufacturing of woolen goods was, in 1858, deemed profitable enough to counter-balance the high rates of interest that then prevailed, and the Pioneer Woolen Mills Company was at that time formed, and during the following year introduced its manufactures (Blankets) in competition with imported goods with a favorable degree of success. In 1856 another association, for the manufacture of woolen goods, was formed, under

the style and name of the Mission Woolen Mills Company, which commenced operations the next year.

In the present Fair the latter company did not exhibit their manufactures. The display of their products in the Fair of the preceding year was both interesting and valuable. As one of the great manufacturing companies of the State, a few facts as to the extent of manufacture and capacity of this company may be appropriate: The capital stock of the company is \$500,000; the works last year consumed over 1,200,000 pounds of fine wool, which was manufactured into 32,000 pairs of blankets, nearly 500,000 yards of flannels, and over 100,000 yards of cloths and cloakings. The present machinery includes 11 sets of cards, 3,500 spindles, and 50 broad-power looms, of the best and most modern description found anywhere in the world.

At the present Fair, the Pioneer Woolen Mills Company made a very large and excellent display of goods of their manufacture, which would be considered creditable in any State. As the pioneer woolen mill of California, which at the present time possesses only two establishments of the kind, the following description may be interesting and useful:

The Pioneer Woolen Mills, which was started in 1859 by the firm of Heynemann, Peck & Co., was destroyed by fire in 1861, and was formed into a stock company, with a capital of \$150,000, December 2d, 1861. The present building and out-houses occupy ten fifty-vara lots at Black Point. The machinery consists of 9 sets of cards, 14 jacks, 2,800 spindles, and 36 looms. The engine is of 200-horse power, but is only worked up at present to 90-horse power, leaving a large capacity of engine for a contemplated increase of machinery. The mills consume 1,000,000 pounds of wool per year, and will probably exceed this amount 100,000 pounds in 1865. The works employ 225 men, and manufacture all kinds of blankets, cassimeres, and flannels. The greatest portion of flannels produced, such as checked, scarlet, blue, grey, and white, being manufactured in the premises into flannel overshirts, undershirts, and drawers, which compare favorably with price of Eastern goods, and give far more satisfaction to the consumer. The company contemplate increasing their stock capital to \$300,000, and orders for a large amount of machinery have been forwarded to the East. The Board consists of F. P. Solomon, President; L. Cohn and A. Block, Directors. Heynemann & Co., 311 to 317 California street, are the agents for the sale of goods.

Between the above-named companies over a million of dollars is yearly retained in the State, and employment in the manufacturing departments directly given to nearly 600 persons. So successful have the woolen mills of California been in their manufactures, that at the present time they have driven out almost all imported blankets and flannels of every description, and promise in a few years at most to do the same with the heavier and coarser qualities of woolen goods. Aside from the value of woolen goods manufactured, the establishment of these mills, by their competition and selections of wool fleeces, have, indirectly, enhanced the value of the entire wool crop of this State and Oregon, and it is not an extravagant estimate that the annual wool crop has been increased \$300,000 in value to the grower.

The Pioneer Woolen Mills of San Francisco were, at the present Fair, awarded the highest prize or award made, viz., the "Institute Medal." This medal, the first of the kind ever awarded by the Mechanics' Institute, was designed for that invention, manufacture, or industrial product which should be decided to hold out promise of the greatest practical benefit to the people of California. In accordance with the decision of a Committee, of which the Governor of the State was Chairman, the medal was awarded to the Pioneer Woolen Mills of San Francisco. The following is the report:

Award of the Mechanics' Institute Gold Medal, 1865.

To the President and Executive Committee of the Mechanics' Institute:

GENTLEMEN:—Your Committee, appointed to award the *Institute Gold*

Medal to that branch of industry which in their estimation promises to be of the most benefit to the State, have to that end made an examination of the various articles on exhibition, and are of the opinion that the *manufacture of woolen goods*, as represented by the productions or the *Pioneer Woolen Mills*, is entitled to the medal. It is therefore awarded to the Pioneer Woolen Mill.

F. F. LOW,
H. W. HALLECK,
H. P. COON,
J. M. ECKFELDT, } Committee.

SAN FRANCISCO, September 9th, 1865.

ON CLOTHING.

Committee :

J. C. MITCHELL. JAMES SCRIMGEOUR. G. W. RAMAGE.

The Committee having made examination of the articles exhibited in this department, report :

Gent's Clothing, by I. Joseph & Co., San Francisco, who exhibit two suits of gent's clothing and cloaks, which are the best, both in cut and workmanship.—Awarded a first premium.

Children's Clothing, by C. A. Fletcher & Co., San Francisco, who exhibit two children's suits and child's cloak, of superior taste and workmanship. Awarded a second premium.

Men's Clothing, by J. H. Hammond, who exhibits three suits of men's clothing. There being no competition, the Committee do not report on their merits. For a military coat of superior make and finish—Awarded a silver medal.

Cotton Wadding and Batting, by Greenberg & Co., San Francisco, who exhibit specimens of both articles, of California manufacture, equal in quality to that imported.

Rubber Clothing, by the "Rubber Clothing Co.", San Francisco, who exhibit samples of rubber clothing and cloth, and a case of fancy articles, which the Committee assumed to be of the same material. These are imported goods of excellent quality. The fancy goods exhibited a very great improvement in the variety of design, as well as quality of manufacture.—Awarded a certificate of merit.

ON GENTS' FURNISHING GOODS.

Committee :

H. B. PLATT. LEWIS LELAND.

The Committee report that, after a careful examination of the gentlemen's furnishing goods, they recommend the medal to be given to Mrs. Morris, for the best home-made shirts, collars and wristbands exhibited.

The Committee also favorably notice the excellent line of imported goods exhibited by S. W. H. Ward & Son.

ON BOOTS AND SHOES.

Committee:

G. M. NICHOLS.

JAMES H. SWAIN.

Boots and Shoes, exhibited by Koenig Brothers, for general workmanship, awarded a first premium.

Ladies' Gaiters, by W. F. Burke, San Francisco, who exhibited a showcase of ladies' gaiters. Mr. Burke made a fine display of good work and fine finish, which are superior to anything of the kind imported.—Awarded a silver medal.

Boots and Shoes, by P. Kelly, San Francisco, one case California boots and shoes. The quality of material and workmanship of these boots and shoes, are unsurpassed. Awarded a silver medal.

ON CLOAKS, ETC.

Committee:

MDE. H. J. LA MARCHE.

MRS. E. W. HITCHINGS.

For Cloaks, by Kerby & Byrne, San Francisco, for superior workmanship and finish, a first premium.

Cloth Basque, by Meyer & Jonasson, San Francisco, for fine quality and finish, a second premium.

Mantillas, by J. L. Ney, San Francisco.—This mantilla-work is awarded a certificate of merit.

ON FURS, HATS AND CAPS.

Committee:

J. K. WHITE.

T. YOUNG.

J. C. MUESSDORFFER.

The Committee report as follows:

Sable and Mink Goods, by A. Muller; also best general assortment of manufactured furs.—Awarded a first premium.

Ermine and Muskrat Goods, by I. C. Mayer & Sons.—Awarded a first premium.

Silk Plush Hats, by Van Tassel.—Awarded a first premium.

Military Caps, by Blake & Co.—Awarded honorable mention.

ON EMBROIDERY AND FANCY NEEDLEWORK.

Committee:

MRS. A. DANNENBURG.

MRS. H. L. DAVIS.

The Committee have examined the various specimens of embroidery and fancy needlework exhibited at the Fair, and recommend the following as worthy of first premium :

Crochet Bed Spread, Miss Rosa Hielboon, a first premium.

Patch-Work Quilt, by Mrs. M. D. Willis, a first premium.

Silk Embroidered Bed Quilt, by Miss M. Tolle, a diploma.

Scarfs, Dresses, Shoes, etc., by Mrs. R. C. Alden, a first premium.

Crochet Tidy, by Mrs. S. Van Roon, a first premium.

Worked Chemise and Pillow Slips, by Mrs. N. G. Kittle, a first premium.

Embroidered Handkerchiefs, by Mrs. B. Velasco. The Committee, in view of the excellence of these articles, award a certificate of merit.

Mathematical Model for Cutting Dresses, by Mrs. Margaret Curtis. The Committee found this system simple and reliable, and one of great utility and assistance to those requiring an instructor in cutting ladies' and children's dresses—it being a perfect guide in dress-cutting. The Committee therefore award the article a diploma.

Regalia and Military Goods, by Daniel Norcross, San Francisco, a most superb assortment of gold and silver embroidery on regalia and military goods.—Awarded a diploma.

Skillful Embroidery, by Mrs. John Harding, late Mrs. P. E. Rogers, San Francisco, for beautiful embroidery.—Awarded a silver medal.

Chenille Work, by Mrs. Mary Gray, of beautiful design and skillful execution. Awarded a diploma.

Worsted Work, by Mrs. E. M. Cottrell, a most beautiful specimen of this kind of work.—Awarded a diploma.

Seventh Department.

SCULPTURE.

Committee:

F. A. BUTMAN,
F. ARRIOLA,

W. A. JEWETT,

O. GORI,
V. SQUARZA.

There were but few exhibitions in this department of the late Fair, excepting the works of Mr. Mezzara.

Some half dozen images in marble (importations), placed about the fountain, which were not entered for competition, require, we presume, no particular mention. Also, one of the same in the Art Gallery, "Samuel," of Biblical history, probably copied from the plaster cast so common, and from the original idea of Benjamin West.

There were on exhibition, by Rogers of New York, and loaned by kindness of Messrs. Jones, Wool & Sutherland, a collection of beautiful statuettes, in plaster, illustrating events of soldier life in the late Rebellion. As works of art they are worth more than a passing notice, exhibiting as they do a force of character and expression, and truth to nature, that tells the story far better than the artist could have done in words. A number of them are worthy of being executed, life size in marble.

One mantel, in Vermont white-marble, designed in good taste, and finely finished, was exhibited by John Daniel.

There were on exhibition several plaster busts by Mezzara, one in particular finely modeled and true to nature. Also a number of cameos, cut by

the same artist, which we think could not be excelled for fine workmanship and artistic effect.

In the United States, thus far, cameo cutting has attracted but little attention, though in Europe it is held in high estimation, taking rank alongside with works in gold and silver, and dating as an art long anterior to the time of that prolific genius, cameo cutter, worker in gold, silver, and bronze, and sculptor, Benvenuto Cellini.

A colossal statue in plaster, of Abraham Lincoln, by P. Mezzara, was placed in a very bad light and position to be seen to the best advantage. In the modeling of this work the artist has had many obstacles to overcome. First, its size (ten feet in height) presents not a few difficulties not encountered in the life size; secondly, the well-known want of anything like grace and beauty (without it was the homely beauty of an honest expression) in the outward appearance of the subject; and, lastly, the prejudice existing against clothing statuary in modern costume.

There has been much said about this last work by Mezzara, and all that we have heard has been on one side. We propose in this place briefly to tell both sides of the story—to speak of its merits as well as of its faults. The ideas of the artist engrafted in the work are truthful to the character of Mr. Lincoln and the history of his time. He is represented with the left arm extended, holding in that hand the "Emancipation Proclamation," in the act of reaching out and proclaiming freedom to the slave. The right arm falling by his side, with the half-opened hand covering and shielding with its protection a scroll representing the Constitution of his country. Under his right foot are allegorical images of Slavery and Rebellion; on the Tree of Life, by which he stands, is a representation of Union. The cast is well finished, as may be seen by the photograph taken before it was placed on exhibition in the Pavilion, which shows the statue to much better advantage than could be seen from any point of view in the place it occupied during the Fair.

The lines of the costume, and some points in the figure, are too sharp and angular, and the left arm is too long. The attitude is dramatic—this was not at all a characteristic of Mr. Lincoln—but the expression of the head and face is fine, and, we should judge, a good likeness.

It is a bold attempt to produce a colossal statue, clothed in modern costume, and some parts of the work are open to a justly severe criticism, yet we think it should not be criticised without giving to the artist the credit which he really deserves.

For Mr. Mezzara's general work we recommend a special premium. Awarded a gold medal.

ON OIL PAINTINGS.

Committee :

P. MEZZARA, T. A. PARRY, FERDINAND VASSAULT.

The Committee report as follows :

Portrait Painting, by Fortunato Arriola. Awarded a silver medal.

Landscape Painting, by F. Butman. Awarded a silver medal.

Oil Painting, by Nahl Bros. & Dickman. The best oil painting in the exhibition. Awarded a silver medal. This painting deserves especial mention for its exquisite drawing and color, and for the life-like impatience of the horse, whose superficial anatomy is delineated in a manner evincing long and careful study. The rider is a graceful-looking horseman, correctly costumed, and beautifully painted.

The Committee regret that there was no competition in the branches to which they have made the various awards.

Lithograph, by Loomis & Swift. Awarded a first premium.

Lithograph, by G. H. Baker. Awarded a second premium.

ON PHOTOGRAPHY.

Committee :

FORTUNATO ARRIOLA. P. MEZZARA. F. E. MILLS.
W. S. JEWETT.

In this department of Art you have assigned us a most difficult duty. To discriminate fairly between the merits of the different contributors in this beautiful and popular branch of Art, where the excellencies of all are so nearly equal, is no easy task. The conclusions arrived at in this Report are the result of careful comparisons, and are given with the hope that they may be charitably received, if we have erred in judgment.

The present collection of Photographs, including plain and retouched in India ink and water colors, is undoubtedly the finest ever exhibited in San Francisco, and is creditable in the highest degree to the various artists. Indeed, we think this exhibition of photographic skill could not be excelled by any display of the kind in any city. California, though young in years, is not necessarily young in Art, especially in this branch, where we have so many elements of its success in our fine, clear atmosphere, our wealth, and the refined taste of our people. Photography, as well as other branches of Art, must and will excel here, if progressing under a kind spirit of emulation and just and intelligent criticism.

Perhaps, in this connection, it will not be out of place for your committee to remark, that by intelligent criticism is not meant the sarcastic and malicious remarks too often indulged in by writers on Art. There is no intelligence or judgment manifested in criticism of that style. The artist learns nothing by it, receives no encouragement, but goes about another work as blindly as before, thinking all the time of the stigma of ridicule to be attached to the result of his labor and study, when he should have been pointed out, no matter how severely, if kindly, the right direction, analyzing and reasoning out its merits and its faults. There are others who, though not sarcastic in their criticisms, condemn that which is really meritorious in a work of Art because it does not attain to their standard; and this standard being far beyond the reach of most artists, they necessarily condemn nearly everything coming under their notice.

To proceed with the duty before us, we find in the collection of Bradley & Rulofson, and Addis & Koch, the best plain photographs on exhibition, and recommend to each a first premium of equal merit, awarding them in this manner, for the reason that we found it exceedingly difficult to decide between the two best competitors.

There are also fine specimens of plain photographs in the collections of Nahl Bros. and Jacob Shew, to whom we award equally the second premium.

For the best *general* collection of life and cabinet-size photographs, retouched in India ink, we award the first premium to Bradley & Rulofson. There are, however, single specimens of this class in some of the collections of the other exhibitors, which are not excelled in the Art Gallery; particularly several finely-worked pictures in ink, of hunting scenes in the collection of Nahl Brothers and Bradley & Rulofson—beautiful specimens of the art of landscape composition.

The second premium for largest sized photographs, retouched in India ink, we award to Jacob Shew.

CARD PHOTOGRAPHS.

There are a few specimens of cards, by Jacob Shew, equal, if not superior, to any others on exhibition, for which we would recommend a special premium.

But for the best *general collection* of standing and sitting pictures in this department, we award the first premium to Bradley & Rulofson; and for the best *general collection* of vignettes in this department, we award the first premium to Addis & Koch.

The second premium for best general collection, to Jacob Shew.

For the best photographs, worked in water colors, first premium to Nahl Bros. The superior merit of Messrs. Nahls' pictures in water colors, is their brilliancy and harmony of color, strength, delicate finish, and truth to nature.

Second premium for water-colored photographs, to Mr. Winter. The pictures by Mr. Winter show careful finish, are free and artistic in touch, and exhibit fine harmony and delicacy of color in the draperies. But, although the flesh is warm and transparent, it is wanting in truth of color, especially in the shadows.

These, we think, are some of the merits and the faults in the beautiful picture of the three young girls, which is one of the most pleasing exhibited in the Art Gallery. The grouping is natural and picturesque.

The photographs in water colors, by Addis & Koch and Bradley & Rulofson, deserve especial mention for their beauty and harmony of coloring, free and artistic handling of drapery and backgrounds. The flesh coloring is strong and vigorous, but is somewhat wanting in truth to nature. In the last named collection there are many very beautiful pictures, both large and small.

For best "Ivorytypes,"—First Premium to Addis & Koch. The small pictures in this class are delicate and very pleasing. The largest ones—cabinet size, with full length figures, have very finely painted backgrounds, but the flesh coloring wants the force and brilliancy of the surroundings.

There are specimens of a new style of picture—photographs on porcelain, painted in water colors, in the collection of Nahl Bros., which are exquisitely beautiful, having all the transparency, delicacy and beauty of miniatures on ivory. For which we award the first premium.

The photographs of California landscapes, by Watkins, are too well known and appreciated to require an extended notice here. The point of sight in most of the views is chosen with rare judgment—points representing the finest combination of lines and picturesque beauty. This excellence, added to many others, place them high in the catalogue of superior productions.

For these pictures, so universally admired both at home and in Europe, we recommend the first special premium.

The photographic landscape views, in and near the city of San Francisco, by Klain, are, some of them, fine specimens of the art—clear, sharp, and well toned. Awarded a first premium.

Lawrence & Houseworth had on exhibition a large and beautiful collection of stereoscopic views, of mountain, valley, lake, and river scenery in California.

RESUME.

BRADLEY & RULOFSON—First premium for large photographs, re-touched.
 " " " Special premium for plain photographs.
 " " " First prem. for card pictures, standing and sitting.

ADDIS & KOCH—Special premium for plain photographs.

“ “ First premium for ivorytypes.

“ “ First premium for card vignettes.

JACOB SNEW—Special premium for card pictures.

“ “ Second premium for large photographs, re-touched.

“ “ Second Premium for general collection card pictures.

“ “ Certificate of merit for plain photographs.

NAHL BROS—First premium for water-colored photographs.

“ “ First premium for porcelain pictures.

“ “ Certificate of merit for plain photographs.

ROBERT WINTER—Second premium for water-colored photographs.

C. E. WATKINS—Special premium for mountain views.

M. KLAIN—Special premium for city views.

LAWRENCE & HOUSEWORTH—Diploma for stereoscopic views.

Eighth Department.

ON MISCELLANEOUS ARTICLES.

Committee:

C. H. HARRISON, H. W. BRADLEY, P. J. O'CONNOR.

Owing to the varied character of the articles submitted to them, the committee, in the absence of owners or other persons to explain the improvements claimed, and their uses have found it difficult to judge as correctly as a more extensive knowledge of the merits of the articles would have admitted.

LEVER JACKS, exhibited by Leffel & Meyers, Portland, Oregon.—These jacks are first rate for all railroad purposes, being quicker of action than either the screw or hydraulic jack in common use.

ARMY PRINTING PRESSES, exhibited by G. W. Edwards, San Francisco.—These presses are of Eastern manufacture, are of fine appearance, and possess many good qualities.

JOB PRINTING PRESS, exhibited by A. N. Rood & Co.—Of Eastern manufacture and good appearance.

STRAW HATS AND BONNETS, exhibited by the Pacific Straw Works, San Francisco.—This exhibition comprised a case of straw hats and bonnets; also the machinery for making them. The machinery is ingenious and the workmanship good. Awarded a silver medal.

SELF-EMPTYING BUCKET AND WINDLASS, exhibited by J. S. Fogg, Oakland. This bucket and windlass are for well uses. The principle is ingenious and appears to work well.

WIND-MILLS, exhibited by Atwood & Bodwell, San Francisco.—Awarded a diploma.

MINING CAR, exhibited by C. Roberts & Co., San Francisco.—This car is of good strong manufacture, the plan of working the tail-board being new, simple and ingenious. Awarded a diploma.

IMPROVED SODA MACHINE, exhibited by W. R. Frink, San Francisco.—This is an improved soda machine, the patent for which has been applied for by Mr. Frink. The main feature is the supplying the materials by means of pumps. The machine is a finished specimen of coppersmith work. Awarded a diploma.

GAS MACHINE, exhibited by Blake & Co., San Francisco.—This machine is of Boston manufacture. No test having been made with it, the committee were unable to judge of its merits.

ROPE COVERING FOR HYDRAULIC HOSE, exhibited by J. L. Moulthrop, Miners' Foundry.—This is a very ingenious improvement for the protection and strengthening of mining hose, and deserves the careful attention of hydraulic miners. Awarded certificate of merit.

DUNBAR'S PATENT STEAM PACKING FOR PISTONS, exhibited by Henry S. Smith, Golden State Foundry.—The construction of the piston head and rings being such that the rings are not bound or held fast by the head. The rings being cut in sections, they are allowed to move freely, readily adjusting themselves to untrue cylinders. They can be made much narrower, thereby avoiding friction; the steam forcing them out to their bearings, they require no springs or bolts, and the body of the piston not requiring to be filled with steam, but only a very small space, makes no loss of steam. They can readily be fitted to old pistons of any style.

LIFE RAFT, exhibited by E. Hawthorne, San Francisco.—This raft is suitable for pontoons for army use, or for ferry use, or for floating stages around a ship. It is cheap, light, and easily constructed.

CASES OF STUFFED BIRDS, exhibited by Lorquin, San Francisco.—Excellent specimens of the art, and beautifully arranged.

EGGS, DYED AND ENGRAVED, exhibited by G. F. W. Richter.—The idea is ingenious, and the execution beautiful—the eggs being a great curiosity.

HORSE SHOES, PINCERS AND HAMMERS, exhibited by Misgill & Cooper, San Francisco.—These are excellent specimens of workmanship.

GRATE BARS, exhibited by Devoe, Dinsmore & Co., San Francisco.—A new style of bar, calculated to burn small coal, give a better draft, and last much longer than the old style. They are well worthy of attention.

TRUNKS, VALISES AND CARPET BAGS, by James Longshore & Co., San Francisco.—The specimens exhibited were of excellent workmanship and appearance, and apparently of a very durable character. Awarded a diploma.

PLASTER ORNAMENTS, by Samuel Kellett, San Francisco.—For beauty of design and excellent finish, awarded a silver medal.

IRON SAFE, by J. Weichert, San Francisco.—An excellent safe for the purpose intended. Awarded a diploma.

Gold, Silver and Copper Preparations, by J. A. Bauer, San Francisco. These consist of nitrate of silver, sulphate of copper, chloride of gold, and sodium, all prepared by the exhibitor. The nitrate of silver is used extensively in photography, about a ton of silver being used every year for that purpose, in the United States. Bauer claims a new method of obtaining sulphurets of copper, for which he has applied for a patent. Awarded a diploma.

DISTILLING OILS. Samples exhibited by E. Benoist, San Francisco, who has distilled lubricating and burning oils of most excellent quality. Awarded a diploma.

COMBINED FAUCET AND MEASURE, exhibited by E. D. Mitchell, San

Francisco. This is an Eastern invention, and is a very ingenious, cleanly and economical method of measuring liquid from a barrel or tank, through the faucet at the time of drawing.

BOOT-BLACKING MACHINE. This machine, by A. E. White, is of California invention, and is said to be the first of the kind ever invented. Its construction shows considerable ingenuity, and its effects a considerable saving of time, a pair of boots being cleaned and handsomely polished by it in a half-minute. The committee awarded a certificate of merit.

BLOW PIPE, by Joshua Hendy, San Francisco; two blow pipes. These blow pipes are constructed with valves, by means of which a small India Rubber bladder is filled with air, from the mouth of which, by the contractive force of the bladder, the air is thrown out of the point of the blow pipe in a continuous stream. This flow of air is also held under the controll of the operator by means of his finger, which, when pressed upon the neck of the bladder, either reduces the current or entirely cuts it off, as may be desired. Awarded a certificate of merit.

FIRE WORKS, Church & Clark, San Francisco, who exhibited a large variety of ornamental fire works. This firm manufactures very largely of fire works, which have a first-class reputation in this market for brilliancy of colors and unfailing execution. The display made by Church & Clark on the opening night of the Fair, is said by good judges to have never been excelled, in good quality, by any display in San Francisco, or elsewhere. Awarded a diploma.

FIRE WORKS, by Tripp & Robinson, who exhibited a fine assortment of patterns of ornamental fire-works. The display made by this firm on the closing night of the Fair was a very beautiful one. Awarded a diploma.

SHOE LASTS, by Brown & Butters, Oakland—nine shoe lasts manufactured at the Pacific Last Factory, Oakland. For excellence of model and good workmanship, awarded a certificate of merit.

COOPERAGE, by F. Nehrlich, San Francisco. Mr. Nehrlich exhibited a most excellent specimen of his workmanship, in the form of a mammoth cask or wine vat, capable of holding 534 gallons. Awarded a diploma.

SELF-REGULATING BENCH PLANES, by Mullear & Bender, San Francisco. This is a California invention, designed to avoid the delay and inconvenience experienced from the clogging of the plane, as ordinarily constructed. This improvement prevents clogging, and the cutting iron being firmly held, no vibration can occur, so the tool does its work neater and with less force than the instrument now in general use. Awarded a diploma.

CEDAR BOARDS, by Macdonald Bros., San Francisco. The sawing of these boards reflects great credit upon the operators, the great accuracy of lines, and smoothness of surface being remarkable. Very large quantities of Spanish Cedar are now used in various branches of trade in California, mostly for ornamental and cabinet work, and the perfect sawing of the same is a nicety in the art. Awarded a silver medal.

BACK BOARDS, by Macdonald Bros., San Francisco. For excellence of workmanship, awarded a diploma.

SAWED LUMBER, by Joshua Hendy, San Francisco, one lot gang circular sawn lumber. This lumber was sawed by one of Hendy's gang circular saw mills, said to be the only mill that saws dimension lumber direct from the log, by one movement of the carriage. For evenness of dimensions the lumber is decidedly superior to any sawed by the ordinary circular saw. Awarded a silver medal.

Redwood Lumber, by Macpherson & Wetherbee, San Francisco, who exhibited two redwood planks, seven feet five inches wide, and twelve feet long—clear, without knot or blemish. These planks were sawed at Noyo River Mills, and are said to be the widest ever sawn. The exhibitors encountered great difficulty in getting a saw of size sufficient for the purpose. They sent an order to the agents of Spear & Jackson, in New York, for a 12-foot sash saw for the purpose. As 10-feet saws were the largest ever made by that celebrated firm, the agents on receiving the order, fearing an error, wrote back to Messrs. Macpherson & Wetherbee to that effect; when the order was repeated, followed by an order from New York to England for a steel plate to be made of the requisite size. As a specimen of the immense growth of the redwood timber which abounds on our Northern coast, the planks are very instructive. During the holding of the Fair, parties wishing to exhibit the capabilities of California for the production of timber, desired to purchase the planks to send to the Great Exhibition to be held in Paris in 1867. The owners, however, have declined to sell the same, preferring to donate them to the Agricultural Department at Washington. Awarded a silver medal.

ON ARCHITECTURAL & MECHANICAL DRAWING.

Committee :

M. F. BUTLER,
D. FARQUHARSON,

IRVING M. SCOTT,
P. J. O'CONNOR.

The Committee appointed on awards for the best architectural and mechanical drawings, report—

That they have examined the different drawings exhibited, and take pleasure in awarding the first premium to the very beautifully-executed designs submitted by Messrs. England & Turnbull, architects. They make this award most cheerfully, as it has rarely been their fortune to meet with such elaborateness and artistic finish, united with such boldness of execution.

The drawing of a steam-engine, by C. W. Boynton, the Committee consider the best mechanical drawing on exhibition, it showing great care in detail and fine workman-like finish, for which they award a first premium.

To Master S. C. Higgins, for drawings of locomotives, the Committee award honorable mention. These drawings showed decided genius, and, with proper study and practice, ignoring the bad habit of indiscriminate coloring, the exhibitor will certainly excel.

ON PENMANSHIP.

Committee :

W. L. D. BARDE, E. KNOWLTON, JAMES DENMAN.

The committee after careful examination of the penmanship of different exhibitors, award to E. P. Heald the first premium for best specimens of penmanship and business writing.

The committee award to F. S. Butler, for excellent "Caligraphy," a special premium of a silver medal.

ON WAX WORK.

Committee :

P. MEZZARA,

F. A. BUTMAN.

The display of wax work comprised some most excellent specimens of the art. The committee award to Mrs. E. V. Green, San Francisco, a first premium for a beautiful basket of wax flowers.

To Miss Mattie Love, San Francisco, who exhibited a small bouquet, composed of one white camelia and violets, a second premium.

To Mrs. J. B. Harmstead, for fruits and shells, a first premium.

To Mrs. E. Piper, for a vase of flowers, honorable mention.

HAIR WORK, by Mrs. L. C. Baldwin, Marysville, one case hair work of beautiful designs and finish. Awarded a certificate of merit.

HAIR WORK, by Mrs. G. Cook, San Francisco, two cases hair jewelry; two frames hair work; one case shell work. The hair work and jewelry are most beautiful, displaying good taste in design, and excellent workmanship. Awarded a first premium.

ON CONFECTIONERY AND CAKE.

Committee :

MRS. G. W. CONKLING,

CHASE BORCHARD.

The committee award to Messrs. Dellwig & Bro., for best confectionery, a first premium.

Also to Messrs. Swain & Brown, for the best cake on exhibition, a first premium.

CATALOGUE OF ARTICLES

Exhibited at the Fifth Industrial Exhibition of the Mechanics' Institute of the City of San Francisco.

A

Arnold, N. S. 306 Battery street, San Francisco: three Wringers; one Washing Machine; one Counter Scale; two Washing Machines; one Monitor Washing Machine.

Abbott, Demming & Co., 618 Battery street, San Francisco: one Stage Coach.

Aiken, J. M. Coulterville, Mariposa county, Cal.: one case and cabinet Mineral Specimens; one specimen of Crystallized Copper, from Arizona; one specimen of Magnesia Wire, etc.

Arizona Consolidated Mining Company: one bar of Lead and Silver; one specimen of Silver and Lead Ore.

Arthur, J. D. & Son, San Francisco: one New York Reaper and Mower combined; eight assorted Plows.

Atwood & Bodwell, San Francisco: one Self-Regulating Wind Mill; one Rotary Wind Mill.

Anthony, F. R. San Francisco: two specimens Copper Ore, from Campo Seco Mining Co.

Armstrong, Thos. San Francisco, late of Durango, Mexico: specimen of Tin Ore.

Anderson, Robert, San Francisco: one Model of a man-of-war.

Aiken, J. M. Coulterville: four pieces of Gold-bearing Quartz; one Cane and Case.

B

Barker, B. F. 35 Webb street, San Francisco: Barker's Concealed Door Spring, with Door—one Model of the same.

Bessen, A. 520 Merchant street, San Francisco: two dozen cans and two dozen bottles Preserved Milk.

Benoist, E. 643 Third street, San Francisco: three bottles Crude Oil; three do. Lubricating Oil; three do. Burning Oil; three do. Benzole Oil; one plan of Still, United States patent.

Bibble, J. H. Santa Clara: two large Milk Cans, with planished tin.

Bosher, Charles F. San Francisco: twenty papers Warren's Lustrina; one specimen of Gold and Quartz, from Isabella Mine; one specimen of Gold Quartz from Nimrod mine; one specimen Gold Quartz from Gold Point Mine; one Shell with Lord's Prayer written upon it.

Brown, A. 214 Third street, San Francisco: one Range and Fixtures, and Boilers attached; one Chimney Top; one Ventilator; two Ten Gallon Milk Cans; one Three Gallon Milk Can; one Two Gallon Milk Can; one One Gallon Milk Can; one Half-Gallon Milk Can; one Quart Milk Can; one Milk Strainer; one Foot, with two Basins; three Scoops; one Beer Measure.

Bullard & Battles, 731 Harrison street, San Francisco: four Petroleum Stoves with Furniture.

Barlow, E. T. San Francisco: two models of Cars and Couplings.

Blake & Co., 524 Montgomery street, San Francisco: one case Military Goods; one case containing Silk Hat.

Benton, Dr. H. A. 109 Montgomery street, San Francisco: one Electro-Galvanic Battery, Dr. Kidder's patent.

Bohn, John, 1218 Dupont street, San Francisco: one Stove and Fixtures; six articles Tin Ware.

Butler, W. M. & Geo. H. Bennett, 653 Clay street, San Francisco: one Dental Chair; one large Marble Vase; one piece Statuary.

Bernard, H. M. Sacramento City: one Track Sulky, weight 70 pounds.

Barlow, E. F. San Francisco: one Model Car Switch.

Burke, W. F. corner Pine and Montgomery streets, San Francisco: one show-case Ladies' Gaiters.

Brown & Wells, San Francisco: one Newell Post and specimen of Rail and Ballisters.

Baldwin, Mrs L. C.: one case Hair Work, made in Marysville.

Brignardello, Michelangelo & Co., San Francisco: three cases Macaroni, twenty-four small boxes Macaroni.

Bradshaw & Co., cor. California and Sansome streets: two cases Matches; one lot Matches in tin, California manufacture.

Butler, Wm. M. San Francisco: one Base to Dentist's Chair; one Barber's Chair.

Belle, Dr. E. San Francisco: one Dental Apparatus; one case Anatomical Specimens.

Brooks, E. C. San Francisco: one Child's Buggy, with Brooks' Patent Spring attached.

Bauer, J. A. San Francisco: one case Preparations—gold, silver and copper.

Beath, J. M. San Francisco: one Quartz Grinder.

Bargion & Johnson, San Francisco: one model Rock Crusher.

Booth, H. J. & Co. San Francisco: one Russia Quartz Screen; one Woodward's Steam Pump; one Steam Engine, driving Machinery at Mechanics' Fair.

Barnes, Wm. & Son, 509 Broadway, San Francisco: three Canary Cages.

Bernard, Charles, San Francisco: lot Coffee and Spices.

Beckford, Dr. D. R. San Francisco: one case Golden Eye Water.

Bruckner, William, San Francisco: one rotary Roasting Furnace.

Berzeret, A. San Francisco: two Stamps.

Brigham, S. O. 111 Montgomery street, San Francisco: one case Stamps, for braiding and embroidery work.

Brady, W. San Francisco: one Banjo.

Bugbey, B. M. Folsom: three boxes Raisins, California growth.

Baker & Hamilton, Sacramento: one Gang Plow, with seed sower and harrow attached; two steel Plows.

Brannan, Samuel, San Francisco: five bottles Calistoga Wine.

Bath & Morrison, 118 Bush street, San Francisco: one Butcher's Cart.

Brown & Batters, Oakland: nine Shoe Lasts, manufactured at the Pacific Last Factory.

Boyd, McAuliff & Co., 412 Pine street, San Francisco: two Parlor Doors, rosewood imitation and California laurel.

Blake, Mrs. B. R. San Francisco: specimens of Stalactites.

Biddleman, Charles, San Francisco: one tray and one box of Precious Stones.

Bloom, W. San Francisco: one bundle Tanned Sheep Skin.

Butterfield, O. Ashton, Colusa county: specimens of Native Copper; one Petrification.

Blake & Co., San Francisco: a Machine for Manufacturing Gas.

Bennett, H. C. San Francisco: an interesting variety of Geological Specimens.

Bidwell, H. C. Indian Valley, one box Specimens.

Barton, N. S. San Francisco: one Boston Corn Sheller.

Baldwin, Miss Carrie, San Francisco: one embroidered Sofa Cushion.

Bauer, J. A. San Francisco: six bottles of California Champagne.

Bendar, Mrs. San Francisco: one Washing Machine.

Badlam, A. San Francisco: one Rat Trap.

Blake, Mrs. San Francisco: seven pieces of Embroidery.

C

Columbet, Annie J. Warm Springs: two Lamp Mats; one Tidy.

Cutter, W. T., Jr. San Francisco: thirteen cases of Whisky; two portable cases of Liquors; two Kegs; one Frame.

Curry & Brother, 317 Battery street, San Francisco: one case Guns and Pistols.

California Borax Co., San Francisco: one case Borax.

Chase, J. L. San Francisco: one Washing Machine, New York manufacture.

Chapman, Mrs. C. M. 687 Market street, San Francisco: one case of Hair and Hair Coloring.

Crocker, C. 744 Howard street, San Francisco: one Washing Machine; one George's Patent Wringer.

Clements, Mrs. Matilda, San Francisco: one case Children's Fancy Clothing.

Cook, Mrs. G. 645 Clay street, San Francisco: two cases Hair Jewelry; two Frames Hair Work; one case Shell Work.

Chiutx, J. H. San Francisco: one Artificial Leg in case.

Coughlin, Miss Maggie, San Francisco: one tub Soft Soap, home-made, from table scraps.

Collins, L. P. San Francisco: seven specimens Copper Ore, from Taylorsville, Plumas Co.

Craig, Golden & Young, San Francisco: one California made Hearse.

Cushing, V. San Francisco: two Excelsior Pumps.

Coffee, Mrs. Col., San Francisco: six Indian Dolls.

Collier, Horace, San Francisco: one Fly Trap.

Cullen, Mrs., San Francisco: samples Sewing Machine Work.

Cummings, E. J. San Francisco: two jars Preserved Fruit, six years' standing.

Chasc, J. L. San Francisco: one Straw and Hay Cutter.

Cooledge, C. C. San Francisco: twelve Ball and Socket Trusses, and two Washington Shoulder Braces.

Cunningham, T. B. Secretary, San Francisco: two specimens Argentiferous Galena, from Emilia Mining Co., Mexico.

Cameron, Whittier & Co., San Francisco: three boxes Glue; one bottle Neat's Foot Oil.

Cameron, Kuenzie & Mills, San Francisco: one Album Stereoscope.

Comins, P. B. San Francisco: two bottles of Sauce.

Conrad, A. San Francisco: two Desks; one Chair.

Comfort, Miss Martha San Francisco: one bouquet of Skeleton Leaves, in a California-made frame.

Chinmark, Moses, San Francisco: one specimen Petrified Wood; one do. Blank Cartridge; one Skin of an Albatross' Foot; one Chinese Pillow; one Fly Gun.

Curtis & Allen, San Francisco: two samples of Paper Flour Bags.

D

Dewey & Co.: Patent Agents, proprietors of the "Mining and Scientific Press," and Job Printers, 505 Clay street, San Francisco. "The Daily Fair Press." The above entry includes one new and improved Gordon Franklin Printing Press, largest size, with steam gearing apparatus; one Fancy Cabinet Stand and Rack, containing 23 cases and other printing materials. "The Daily Fair Press," a sheet 23x32 inches in size, containing eight pages and thirty-two columns, was circulated free to all visitors to the Fair. It contained a full report of the Fair, and all interesting events and incidents connected with its progress.

Dow, Leonard, Sacramento: one Grain Separator.

Denn, John, 13 Moss street, San Francisco: one Wine and Cider Press, invented by Denn & Manrow, Sacramento, 1863; one bottle California Brandy.

Daley, John, Second-street Dry Dock, San Francisco: one Race Boat; five Models of Boats.

Dannenbaum, Ratzentine & Co., 20 Montgomery street, San Francisco: one case Fancy Articles.

Dell, Cranna & Co., Front street, San Francisco: one Coal Oil Cooking Stove; one piece of Paraffine; six samples of Coal Oil; two samples fine Lubricating Oil.

Daniel, John, San Francisco: one Marble Mantel Piece.

Dewey & Co., Mining and Scientific Press: one doz. Quartz Operators Hand Book; four bound volumes "Mining and Scientific Press," as specimens of newspaper printing; lot of Specimens, Ores and Curiosities.

Devoe, Dinsmore & Co., San Francisco: sixteen pieces Grate Bars, W. W. Tupper's Patent: two Grate Bar Patterns.

Dellwig & Bro., San Francisco: one case Confectionery; two Ancient Moulds, made in 1750 and 1781, to be used for candies, blanc mangc, etc.

Damon, Mrs. San Francisco: samples Sewing Machine Work.

Dow, J. F. Russian River: sample of Corn.

Dougherty, John, San Francisco: one Soap Stone Saw-mill; one Rock Crusher; one Pulverizing Mill.

Deming & Co., San Francisco: one lot of Howe's Sewing Machines.

E

Eureka Broom Factory, San Francisco: five boxes Broom Brushes; one package Toy Brooms; three packages do. Wisp; two do. Brooms; five single Brooms.

Eastman & Bro., San Francisco: four pieces School Furniture.

Easton, O. W. San Francisco: lot of Mineral Specimens; one Shell Fossil; one sample Coal, from near Mayfield, Santa Clara Co.

Eckart, W. R. Union Iron Works, San Francisco: one Cut-off Valve Indicator.

Easton Brothers, San Francisco: two Secretaries.

Edwards, George W. San Francisco: one Army Printing Press.

Ebbets, A. M. San Francisco: specimen of Fuca Coal

Easton, O. W. San Francisco: three pieces of Brown's Metallic Weather Strips.

F

Francois, C. agent, 605 Sansome street, San Francisco: one jar Cream Tartar; five bottles Cognac, manufactured by E. Vache & Bros., Los Angeles.

Frink, W. R. San Francisco: one Improved Machine for manufacturing Soda or propelling Machinery; lot of Mineral Specimens.

Foucault, V. M. Washington Territory: one case Geological specimens.

Fenn, F. C. M. San Francisco: two cases Embroidery Stamps.

Fogg, J. S. Oakland: one Self-Emptying Well Windlass.

Fuguzi, J. F.: one case Perfumery.

Fletcher, C. A. No. 1 Montgomery street, San Francisco: three suits Boys' Clothing; one Boys' Coat; one Boys' Cloak; Boys' Suit on frame; one Youths' Embroidered Suit—entered for competition.

Folsom, A. San Francisco: one Sulky.

Flora Company, Florence ledge, Alpine county: lot of specimens.

Frisbie, W. B. & Co., San Francisco: one Canterbury & Vanpel Piano.

G

Gouldin, J. C. San Francisco: four specimens Argentiferous Galena.

Goodwin & Co., San Francisco: one Parlor Set of Furniture, in green, gold and brocatelle, consisting of twelve pieces; one Library Set, in leather—ten pieces; one Side-board; one Etagre; one patent Chair; one rosewood Chamber Set, six pieces; one Turkish Chair; one Side-board.

Graham, A. Fuca Straits, W. T.: one piece Coal.

Gibb, G. W. & Co., San Francisco: one case California manufactured Colors.

Grimm, A. San Francisco: samples of Hair Rejuvenator.

Garratt, W. T. San Francisco: nine large Church Bells, with Garratt's Improved Hangings; one Ship Bell; Garratt's Patent Hose Couplings and Bands, for mining purposes; Hydraulic Pipe and Nozzle; Steam Whistles; Steam Guages; Water Guage, with glass tube; Magnetic Guage; Steam Globe Valve; Flange, Steam, Water and Gas Cocks; Oil Cocks and Pumps, with a variety of other brass goods; samples of Garratt's Patent Anti-Friction Metal.

Goodwin, J. P. & Co., San Francisco: Parlor Set of furni-

Gale, Mrs San Francisco: samples Sewing Machine Work.

Gallagher, Weed & White, 125 First street, San Francisco: specimens of Brass Castings; lot Sheathing Nails; one Steamboat Gong Bell.

Greenberg & Co., San Francisco: one bale white cotton Batting; one package white Cotton Wadding.

Gaster, Robert: three Tea Economizers.

Gavin Gibb & Co., San Francisco: three barrels Paint; three half barrels Paint.

Goodwin & Co., San Francisco: one Parlor Set furniture, in green and gold finish; one Chamber Set, consisting of four pieces.

Gabb, Prof. W. M. San Francisco: three Fossils.

Gold Point Ledge Mining Company: Samples of Ore.

Grover & Baker Sewing Machine Co., J. W. J. Pierson, Agent, San Francisco: seventeen Sewing Machines; also, a lot of Clothing and Articles made upon said machines. Entered for premium.

Graves, H. T. & Co., San Francisco: Wire Summer House; two rolls California-made brass wire Quartz Screens; Ore Screen; Grape Sieve; Coal Screen; Sand Screen; two brass Fenders; seventeen rolls Iron Wire Cloth; six round Rat Traps; fifteen Foundry Riddles; lot of Flour Sieves; lot Wire Frames and Stands; Cheese Safe; Wire Screen for doors and windows.

Godfrey, Mrs. Flora S. San Francisco: one Antique Chair; one Fancy Tidy.

Green, Miss S. V. San Francisco: specimen of Wax Flowers.

Greenhood & Newbauer, San Francisco: mammoth sample of Coal from the Eureka Coal Co.'s mine, Mt. Diablo. This block of coal weighs 5,225 pounds

H

Harrison, C. H. 517 Front street, San Francisco: three Eccentric Steam Wrecking Pumps.

Halsted, Joel, San Francisco: one Cider and Wine Mill.

Hawthorne, E. 638½ Mission street, San Francisco: one Model Life Raft.

Howard, Mrs. I. J. cor. Pine and Montgomery streets, San Francisco: three Abdominal Supporters for Ladies; one pair Improved Shoulder Braces; one Cigar Case; two Pencil Drawings; five Book Marks on Rice Paper.

Hunter, A. San Francisco: one Concentrator and Amalgamator; one Grain Separator; one case Sulphurets.

Hobart, J. A. Oakland: one large size Hutchinson's Wine and Cider Mill.

Hanscom, W. W. San Francisco: two Hanscom's Quartz Crushers, different sizes.

Hitchcock, G. B. & Co., San Francisco: one case Blank Books; one Model Bottle Ink.

Hallidie, A. S. San Francisco: sample California-made Wire; Wire Rope and Cord.

Hobart, J. A. Oakland: one Mazana Plant of Italy—very rare.

Holloway D. Gilroy, Alameda county: one Gang Plow.

Hoyt, L. D. San Francisco: one Soda Apparatus.

Hansbrow Pump Co., San Francisco: twelve Pumps.

Hecker, Adolph, San Francisco: one Foot Lathe.

Hirshfeld & Moritz, San Francisco: Gents' Wig in glass case.

Hungerford & Hendy, San Francisco: one Prater Concentrator.

Hendy, Joshua, San Francisco: two Blow Pipes; drawings and plans of Hendy's Gang Circular Saw Mill; two Circular Saw Guides.

FIFTH INDUSTRIAL EXHIBITION

Hunter, L. C. San Francisco: specimens of Lava from Sandwich Islands.

Howland, Rufus, San Francisco: one Tree Nail Machine.

Hill, Samuel, agent Florence Sewing Machines, 111 Montgomery street, San Francisco: one lot Sewing Machines.

Hammond, J. H. San Francisco: one Uniform Suit; one Gents' Business Suit; one Gents' Dress Suit.

Harrison, A. San Francisco: one model Patent Chimney Top.

Harris, Ben. E. 314 Jessie street, San Francisco: self-regulating Feed Box.

Habich A.: Silver Ore from Columbus district, Nev.

Hallidie, A. S. & Co., San Francisco: specimen of the Atlantic Cable.

Hinckley, J.: specimen of Gold from the Hinckley claim, Amador county.

Hunter, Andrew, San Francisco: Sulphurets concentrated by Hunter's Concentrator.

Hinkle, Phillip, San Francisco: one Grinder and Amalgamator.

Hendy, Josiah, San Francisco: one lot gang and circular sawed Lumber.

Harrison, Wm. P. agent San Lorenzo Paper Mill: lot Straw Paper; lot Board Paper; lot Newspaper.

Harrison, Wm. P. San Francisco: one case of Electrotyping.

Hill, Mrs S. San Francisco: one Sofa Cushion.

Hollis, Wm. San Francisco: one Stove-pipe Damper.

Hepburn & Peterson, San Francisco: one Amalgamating Pan.

Howard, W. A. San Francisco: one Pebble Table.

Hoyle, George, San Francisco: one Marble Frame; one Ornament.

I

Irwin, O. Marin county: one specimen of White Redwood.

Irwin, Jas. San Francisco: one Liquor Case.

J

Jewett, Jarvis, San Francisco: one Palmer's Artificial Leg.

Johnston & Reay, San Francisco: one Range; one Stove; one Double Action Force Pump; one Garden Engine; one Patent Ventilator.

Joseph, J. & Co., Pine and Montgomery streets, San Francisco: samples of Boys' Clothing, made out of Mission and Pioneer Woolen Goods; one boys' Zouave Suit.

Johnson, J. B. San Francisco: one Colburn's Patent Churn.

Jewett, J. R. Petaluma: two cheeses.

Jones, W. G. San Francisco: lot Rosin; one bottle Turpentine, California manufacture.

Jorgensen, J. E. 28 Third street, San Francisco: one Air-Tight Stove; two Hendrickson's Chinney Tops.

Jessup, Wm. H. San Francisco: two lots Matches, in glass cases; one lot Matches, in boxes—California manufacture.

James Charles A., San Francisco: samples of Eureka Patent Blasting Powder—California manufacture.

Jones & McCormick, San Francisco: one Operating Model of Screw Paddle Wheel.

K

Koenig Brothers, 608 Washington street, San Francisco: seven pairs Boots; one pair Shoes.

Keller, M. 609 Front street, San Francisco: one Stand with

Kleinclaes, C. & Fauss, Willows' Brewery, San Francisco: one barrel Ale.

Kirby & Co., Santa Cruz: two rolls Sole Leather; nine sides Assorted Leather; one Walrus Hide.

King, F. S. San Francisco: one Turnip.

Kelley, P. San Francisco: one case Cal. Boots and Shoes.

Kimball, G. P. & Co., San Francisco: Doctor's Phæton; Picnic Wagon.

Knowles & Clarke, San Francisco: one case Dental Specimens—very fine and substantial.

Kenney, W. B. J. cor. Sacramento and Montgomery streets, San Francisco: six new Mammoth Fountain Pens; six Book-keeper's Pens; six Bank Pens; six Correspondents' Pens; six Mammoth Pens; six Accountant's Pens; six Gents' Revolving Pens; three Ladies' Tablet Pens.

Kohler, A. San Francisco: two cases Fancy Articles; one case Musical Instruments; lot Bronze Statues; lot Vases; two Silvered Globes; three Drums.

Keene, C. C. San Francisco: one case of Accordeons and Flutinas; one case Musical Instruments.

Kerby, Byrne & Co., San Francisco: one Velvet Circular; two plaid Circulars; one Silk Basque; one Silk Sacque; one case Silks.

Keller, M. Los Angeles: four bales Tobacco; three Cotton Plants.

Kellogg, Hewston & Co., San Francisco: samples of Sulphate of Copper.

Keith, Wm. H. & Co., San Francisco: one glass jar of Crude Petroleum, from Mattole.

L

Leffel & Meyers, Portland, Oregon: five Leffel's American Double Turbine Water Wheels, invented in Springfield, Ohio, 1862; four Leffel's Lever Jacks.

Lamborn, S. M. San Francisco: one Frame Model of a Barn; one piece of Live Oak, having two barks.

Leland, Lewis & Co., Occidental Hotel, San Francisco: two cases Confectionery; one case Minerals, and pieces of the Big Tree of Calaveras county.

Lamb, F. B. & Sons, Agents, 115 Jessie street, San Francisco: one Edson's Patent Washing Machine.

Layne, Mr. Placer County: specimens Silver Ore.

Ludeman, Wm. San Francisco: case Meerschaum Pipes.

Longshore, Jas., San Francisco: two Trunks; two Valises; four Carpet Bags—the Valise in glass case was entered for competition—two Valises; two Carpet Bags.

Locan & Co., San Francisco: one case Fancy Goods.

Lundborg, J. A. W. San Francisco: one case Spring Flower Dentifrice.

Liesenfield, P. San Francisco: one Billiard Table.

Liddle, R. & Co., 538 Washington street, San Francisco: three cases Sporting Goods; one rack of Muskets, Swords, etc.

Largoardi, B. San Francisco: one case Shot Guns and Sporting Articles.

Layrus, A. Placerville: specimens gold bearing Quartz.

Lannay, Peter, San Francisco: one Steam Governor; one model Oscillating Engine.

Lake, W. B., Agent, No. 20 Government House, San Francisco: Linscott's Patent Chamber Drill—Godfrey & Sherwood, proprietors.

Larkins & Co., San Francisco: two Open Buggies; one Top Buggy.

Lanszweert, Dr. San Francisco: samples of Photographic, Granulated and Crystalized Nitrate of Silver; samples of Copper Ore, Bullion, and Sulphate of Copper, from

M

Moulthrop, J. L., Miners' Foundry, San Francisco: two Rope Coverings, for Mining Hose—McArthur & Cheney's patent.

McCaffery, San Jose: one demijohn of Brandy; two do. Wine; one do. Usquebaugh.

Mason, John, San Francisco: one barrel Light Ale; one barrel Stock Ale; one barrel Porter.

Medan, J. & P. 1004 Dupont street, San Francisco: one case of Meerschaum Pipes.

Morris & Cohen, San Francisco: one case Matches.

Manning, G. San Francisco: four pieces School Furniture

Meyer & Jonasson, 10 Montgomery street, San Francisco: nine cloaks; 2 pieces Cloth; one piece Velvet.

Mayer, I. C. & Sons, 5 Montgomery street, San Francisco: one lot of Furs, Robes, etc.

Misgill & Cooper, 810 Market street, San Francisco: one case Horse Shoes, California Manufacture; one Shoeing Hammer.

Misgill, F. F. San Francisco: one pair Horse Shoe Pincers.

McCormick, H. M. Tulare county: one lot Silver Ore, from Kearsarge district.

Martell, John, San Francisco: one case of Silver Plated Goods; Coach and Carriage Trimmings.

Mulcahy, P. San Francisco: two boxes California Soap.

Mandeville, E. San Francisco: one Bellows, California make.

Mallon, John & Co., San Francisco: one lot Ground and Cut Glass.

Macdonald Bros., San Francisco; lot Cedar Boards.

Morrow, Thos. H. San Francisco: one case Gravel Specimens, from the American North San Juan Co., Nevada Co., Cal.

Marwedel & Ott, 329 Bush street, San Francisco: one showcase Hardware and Mechanics' Tools.

Morris F. & Co., San Francisco: large specimen gold and silver bearing Quartz.

Mullear & Bender, 123 Kearny street, San Francisco: several self-regulating Bench Planes, George Mullear, inventor, San Francisco—patented 1865.

Meader, C. T. Stockton: rich samples Copper Ore, from Calaveras and Amador counties.

Martin, W. H. San Francisco: one barrel Benicia Cement; one box Cement Rock.

Mitchell, E. C. San Francisco: one combined Faucet and Measure.

Macomber, Henry S.: specimens of Plumbago, from Eureka Plumbago Mining company.

McLaughlin, M., Foreman Broderick Engine Co., San Francisco: Gold Medal.

Mock, E. F. Petaluma: Model of Hay Press.

Macdonald & Bro., San Francisco: one specimen of gold, from Williams Creek, Cariboo, British Columbia; superior samples of Back Boards for Looking-Glasses, etc.

Marsh, Pillsbury & Co., San Francisco: one case Hardware, J. E. Bleckman, manufacturer; four Weather Vanes; lot Lead Crucibles, Horton Chucks; lot solid Emery Wheels.

Mish, Mrs. S. San Francisco: one case of Millinery Goods.

Maher, Thomas, South Watsonville, Santa Cruz county: one Convertible Gang Plow.

Muller, Adolph, San Francisco: set of Furs.

Myers & Ritchmeyer, Drytown, Amador county: one block of Marble.

McPherson & Wetherbee, San Francisco: two Redwood

Moening, G. 140 Fourth street, San Francisco: one lot Tin-ware; one Stove, with "Dictator" attachment, and Stove Furniture.

N

Nerlich, F. San Francisco: one 530-Gallon Cask.

Norcross, Daniel, San Francisco: two cases Regalia and Military Goods.

Nolan, P. San Francisco: two pairs Boots and Glass Case.

Ney, J. L. 14 Montgomery street, San Francisco: two Wax Figures; eight pieces of Cloth; four Mantillas; one Silk Basque.

Natural History Society of San Francisco: lot of specimens from Big Trees.

Newman Bro., six pieces Willow Furniture.

Newman, Carlton, San Francisco: one lot Fruit Jars.

Noble Oil Well Company, San Francisco: one jar of Crude Petroleum.

O

Owens, John B. 10 Third street, San Francisco: one case assorted Coal Oil Lamps; Samples of Coal Oil Cooking Stoves.

P

Paltenghi & Larseneur, 321 and 423 Jackson street, San Francisco: two Lions, in Italian stone; four Marble Vases; two Marble Female Figures; one Eagle, of Italian stone.

Piper, Mrs. E. (formerly Mrs Morris), 37 Sutter street, San Francisco: two Show Cascs; one Table; one Vase of Wax Flowers; one lot of Shirts, etc.

Plummer, C. A. & Co., San Francisco: three bottles of Salt.

Pacific Straw Works, 603 Market street, San Francisco: one case Straw Hats Straw Bonnets; one Machine, Osborne's patent, for making Hat and Bonnet Frames.

Plummer, C. A. & Co.: one jar Liverpool Coarse Salt.

Paine, Geo. C. San Francisco: one Metal Fence.

Parkhurst, V. S. W. San Francisco: two Store Locks, Miles' patent.

Porter, G. K. San Francisco: four cases Boots.

Prevost, L. San Jose Nursery: seven boxes Silk Worms and Cocoons.

Price, M. San Francisco: one case Cutlery, California make.

Plate, A. J. San Francisco: one case Guns and Sporting Articles.

Patton, W. P.: samples Copper Ore.

Pacific Guano Company, San Francisco: one sample of Guano, from Johnston's Island.

Perkins, D. L., Golden Gate Seed Gardens, Oakland: 22 varieties of Pears; 23 do. of Apples; 7 do. of Plums; 7 do. of Dried Fruits; 1 jar of Brandy Peaches; 108 varieties of Seeds, in bottles; 70 varieties of Garden Vegetables.

Plum, Chas. M. San Francisco: three specimens of Silver Ore, and one of Sulphuret of Mercury, all from Mexico; a Mineral picked up on the Rocky Mountains.

Plank, Miss, San Francisco: Specimens of Silver Ore and Silver Bullion.

Pacific Anatomical Museum, San Francisco: one case of Eggs, showing different stages of incubation; one anatomical specimen of a Dissected Arm; one anatomical specimen of a Child.

Porter, G. K. Santa Cruz: three bundles of Calf Skins.

Pratt, Mrs. Judge, San Francisco: one Feather Fan, in frame

Pierce, J. San Francisco: set of Parlor Furniture, etc.

FIFTH INDUSTRIAL EXHIBITION

R

Rosenblatt & Co., 123 and 125 Montgomery street, San Francisco: one show-case with Real Laces and Fancy Goods.

Ramsdell, B. H. San Francisco: one piece Coal from Black Diamond Coal Mine.

Rondal, E. San Francisco: six Specimens Copper Ore from La Victoire mine, Mariposa county.

Rocchiccioli, R. F. 523 California street, San Francisco: four Coal Oil Lamps; two Candelabra; three Statues; ten Brackets; two Vases; one Pitcher; one set Grate Bars; one Die Plate.

Rubber Clothing Co., San Francisco: one case Rubber Fancy Articles and Jewelry.

Reed, John: San Francisco: one model Life Boat.

Reis, Gus. San Francisco: samples of Silver Ore from Mexico.

Rubber Clothing Co., San Francisco: twenty-eight samples Rubber Clothing; one roll Rubber Sheeting; four Cushions; two Life Preservers; one Chest Expander.

Ripley & Kimball, San Francisco: two Pianos; one 5-octave piano style Melodeon; one 5-octave scroll leg Melodeon; one 4½-octave Church Harmonium.

Rolland, Jules, San Francisco: one Bed Lounge, entered for premium.

Runyon, Jacob, Sac. River: twelve varieties Pears; five do. Apples.

Ross, Henry, San Francisco: one specimen of Silver Ore, one specimen of Plumbago, from the Silver Era mine, Summit City, Alpine County.

Rix, Logan & Co., San Francisco: one Hammer Battery.

Rood, A. N. & Co., San Francisco: one Job Press.

Reed, J. W., Simmons Spring, Colusa County: specimens of Fossils and remarkable Petrification.

Roberts, C. & Co., San Francisco: one Mining Car; one Miniug Wheelbarrow.

Rowland, Walker & Co., San Francisco: one box of White Sand, from David Jacks, Monterey.

S

Sweet, James, San Francisco: three bottles Sonoma Red Wine; three do. White Wine.

Sheffield & Patterson, cor. Battery and Jackson streets, San Francisco: two Mulay Saws; one Drag Saw; one Pit Saw; one Felloe Saw; four Cross-cut Saws; seven Circular Saws; two Butcher Saws; six Butcher Blades; one Irou saw; two Saw sets.

Stetson, A. M., 54 Third street, San Francisco: one model Self-Operating Amalgamator.

Standard Soap Co., San Francisco: seventeen boxes Soap; two jars Soap; ten boxes Washing Powder; one box Medals.

Solomon, R. & Sons, San Francisco: one glass case of Upholstery Goods; four Chairs and Outside Drapery.

Strenzel, Dr. J. Alhambra Valley, Cal.: one lot of Wines.

S. F. Glass Works: one stand Fancy Articles in Glass, California manufacture.

Sajons, J. San Francisco: lot Half-and-Half, in bottles.

Schnman, H. San Francisco: one case Meerschaum Pipes and Fancy Articles; two cases Canes; one lot Tobacco and Cigars; one lot Canes.

Saunders, Wm. San Francisco: sole agent for the Pacific coast: Patent Pulley Evener, for two-horse draft.

Strelitz, J. & Co., San Francisco: lot of Coffee and Spice.

Steele, James, 521 Montgomery street: sample crude Petroleum, from Noble's well, Mattole, Humboldt Co., Cal.

San Francisco and Pacific Refinery: samples of Sugar

Sickler, Caleb M. San Francisco: set Stove Furniture; twenty-one Milk Cans; two Measures, all California make; one Cylinder Boiler; two Stoves; one Putnam's Wringer.

Stevens, Andrew, San Francisco: Stevens' Pressure Packing, invented in San Francisco, and patented March 7th, 1865. Manufactured at the Vulcan Iron Works, First street.

Singer Manufacturing Co., 139 Montgomery street, San Francisco: five "Letter A" Family Sewing Machines, inclosed in folding cases; eight "Letter. A" Family Machines with folding covers; one "No. 3" Standard Vibrating Presser Machine, for harness and carriage trimming; four "No. 2" Standard Machines, for general manufacturing work, such as tailoring, boots and shoes, etc. ; one old style Cabinet Family Machine.

Strong & Co., Main street, between Folsom and Harrison, San Francisco: one Union Amalgamator.

Slotterbeck, Charles, San Francisco: one case, two Rifles and one Shot Gun.

Schrieber, J. & C. San Francisco: Spring Mattress; four Feather Pillows ; two Pulu Pillows ; one bale Pulu ; one Bedstead.

Smith, Henry S., San Francisco : Dunbar's Steam Piston Packing.

Scoville, W. H. & Co., San Francisco: four boxes Candles; one cake Acid Block.

Sickler, Caleb M. Kearny street, San Francisco: Coal Hods, California make.

Severin, Theodore, 522 Kearny street, San Francisco: two show-cases of Pistols, Guns, etc.

Strahle, J. San Francisco: one French Carom Billiard Table; one Centre Table.

Stetson, A. M. San Francisco: one Self-Operating Amalgamator.

Salmon, J. & W. C. San Francisco: one Model of Settler.

Sullivan & Cashman, San Francisco: twelve bars Copper Sykes. Z. San Jose: one Seed Drill.

Selby, T. H. & Co., San Francisco: eight coils, three cones three reels, and three pieces of Lead Pipe, and one package of Shot Lead, manufactured at their lead factory, in this city.

Swain & Brown, San Francisco: one case of Ornamental Cake and Confectionary ; one Marine Tree, from the Marquesas Islands; one bunch of Coral.

Smith & Hanscom, San Francisco: one Tyler Water Wheel.

Smith, James M., San Francisco: two Coffee Roasting Machines.

T

Taylor, S. P. agent Pioneer Paper Mill, Clay street, San Francisco; sixteen bundles Wrapping Paper; three do. Butter Paper; six do. News Paper; four do. Fancy Wrapping Paper.

Traver, M. E. & Brothers: twelve Eureka Clothes Wringers.

Tubbs & Co., San Francisco: seventeen coils Manila Rope—entered for premium.

Thompson, W. S. San Francisco: one Family Carriage; one Rockaway.

Teuber & Hoffman, 431 Kearny street, San Francisco: one Show Case.

Trumbull, Wm. San Francisco: lot Horse Collars.

Taylor & Iredale, San Francisco: one Stove, "Fire King," California manufacture ; one Stove, "Peace Maker," imported.

Thompson, Peter, San Francisco: one box Lettuce.

Thompson, J. D. 321 Montgomery street, San Francisco: one lot American Liquors.

Taylor, C. L. San Francisco: specimen Crystallized Quartz, from Mexico.

Thorne, I. N. Secretary of the North American Tin Company: samples of Stream Tin Ore, from Durango, Mexico.

Traver, G. W. San Francisco: four Minor's Patent Pocket Lanterns.

U

United Anaheim Wine Association, 321 Montgomery street, San Francisco: four dozen Wines and Brandies.

Union Carriage Factory, San Francisco: one Milk Wagon.

V

Valledieu, Charles, San Francisco: one model of Brig. Schooner.

Van Zandt, J. W. San Francisco: one lot Perfumery.

Vanderburg, Dr. J. P. P. San Francisco: three bottles Tape Worms; three bottles Heads of Tape Worms; one bottle Nondescript; nine bottles Worm Syrup.

Varney, Thomas, San Francisco: one Amalgamator.

Vulcan Iron Works Co., San Francisco: one double piston Steam Engine.

Van Reed, C. M. San Francisco: nineteen curiosities, from Japan.

Van Tassel, Theodore, San Francisco: one case Silk Hats.

Vallagia, San Francisco: one case containing six double barrel Shot Guns, one Rifle, and one pair extra Barrels.

Vulcan Foundry, San Francisco: one Baux & Guiod's Separator and Amalgamator, California invention, manufactured at Vulcan Iron Works.

Valparaiso Mining Co., by Henry N. Karp; five specimens of gold bearing Rock.

Velasco, Mrs. R. San Francisco: three Embroidered Handkerchiefs, and designed to imitate engravings.

W

Walton, E. W., Drytown, Amador county, Cal.: one Wine and Cider Press.

Wright, J. O. 415 Pine street, San Francisco: one Patent Window Blind Hinge and Fastener.

Winter, Daniel & H. A. 620 Market street, San Francisco: one Broadcast Seed Sower and Cultivator combined.

Ward, S. W. & Son, 323 Montgomery street, San Francisco: Furnishing Goods.

Walmsley, W. W. 112 Fourth street, San Francisco: five pieces Artesian Well Rope; two pieces Ventilators.

Winegar, A. B. San Francisco: ten large bags Salt; ten small bags Salt; seven boxes Salt.

White, A. E. San Francisco: two Boot Blacking Machines.

Wilson, B. D. & Sons, San Francisco: sixty-two bottles Wines, from Los Angeles.

Waunenberg, H. & Co., New York Brewery, San Francisco: two and a half barrels Ale.

Will & Frink, San Francisco: two cases Cutlery; two Patent Hotel Annunciators.

Williams, F. San Francisco: one lot Curtis' Yeast Powder.

Wheeler & Randall, San Francisco: one Excelsior Amalgamator.

Wood, Geo. M., San Francisco: one show-case, containing samples of engraved Door Plates, Seals, Stamps, etc.; one Seal Press, and lot of Diamond Cement.

Worth, L. W. San Francisco: one Patent Paper Reel, for a telegraph machine—a California invention.

Wilson & Evans, San Francisco: one case Guns and Sporting Articles.

Wasserman, E. San Francisco: lot specimens of Ore.

Waters, E. D. San Francisco: specimens Gold Quartz, from Eagle company, Amador county.

White, Wm. A.: one bundle of "equisetum hyemale," commonly known as Horsetail, or Dutch Rush.

ART GALLERY.

—Annie J. Columbet, aged 7 years:

- 1 Crochet Tidy.
- 2 Two Lamp Mats.

—Henry Pfaff:

- 3 Worsted Fire Screen.
- 4 Needle-worked Alphabet.
- 5 Crochet Table Cover, "Fruit."
- 6 Crochet Table Cover, "Toilet."
- 7 Mrs. L. Bock: One Rug.
- 8 C. L. Houghton: Crayon Drawing, "Cliffs of the Tornados."
- 9 Frank Gruner, aged 13 years: Architectural Drawing.

10 Charles Villedieu: Model of Brig.

11 Miss Rosa Heilboon: Crochet Bed Spread.

—Mrs. A. C. Bissell:

- 12 Large Worsted Lamp Mat.
- 13 Small Worsted Lamp Mat.
- 14 Small Worsted Lamp Mat.

—S. C. Bugbee & Son, Architectural drawings.

- 15 Design of Interior of Union Hall.
- 16 Exterior of Union Hall.
- 17 Inauguration of Union Hall.
- 18 North View, Residence of Ed. Learned.
- 19 Southeast View, Residence of Ed. Learned.
- 20 Water-color View, Residence on Jamaica Plains.
- 21 Residence of Mr. Jordan, Jamaica Plains.
- 22 Out All Night, And No Key.
- 23 Premium Design of Hossefross Monument.

—Oscar Kaltschmidt, Oil Paintings:

- 24 Fruit Piece.
- 25 Columbus in Chains.
- 26 Last Scene in King Lear.
- 27 Titian's Daughter.
- 28 Portrait of a Lady.
- 29 Portrait of a Little Girl.
- 30 Drawing from Card Picture, India ink.
- 31 Mrs. Anais Lerond: Show-case of Laces.
- 32 33 34 Miss G. C. White: Fruit Drawings.

—M. K. Laudenslager, Pen Drawings:

- 35 Ancient Drawing.
- 36 Equestrian Picture.
- 37 Ornamental Printing.
- E. P. Heald:
- 38 Declaration of Independence.
- 39 Specimen of Record and Ladies' Writing.
- 40 Large specimen of Bold and Commercial Writing.
- 41 Specimen of Book-keeping.
- 42 Specimen of Mercantile Writing.

—Mrs. Sarah Atkinson:

- 43 Leather-work Frame, with Diploma.
- 44 Leather-work Frame, picture, "Minnie."
- 45 Leather-work Frame, picture, "Helene."

—James A. Kerr:

- 46 Riding Out a Gale, water colors.
- 47 Scene in the West of England.
- 48 Mrs. J. J. Gardiner: Moss Landscape, in Cornelian stone frame.
- 49 Miss Ida Louise Peck: Bouquet in Chenille work.
- 50 John Alsop: Self-opening Parasol.
- 51 Mrs. Adelaide Handy: Knit Bed Quilt.

—Mrs. M. G. Gillitte:

- 53 Two widths Silk Embroidery.

- 54 Embroidered Pin Cushions.

- 55 Miss Louise Zeller: Crochet Tidy.

—B. C. Turnbull:

- 56 Sermon on the Mount, executed with a pen.
- 57 Head of our Savior, executed with a pen.
- 58 Portrait, Queen Victoria, executed with a pen.
- 59 Victor Emanuel and Garibaldi, executed with a pen.
- 60 Sepia Sketch of Howard street, San Francisco.
- 61 Card, with description.
- 63 Lizzie Winterburn, San Jose: Signing of Declaration of Independence, in pink and satin.

- 64 Charles H. Fischer: Model of Swiss Cottage.

—Mrs. I. J. Howard, Pencil Drawings:

- 65 The "Look Out."
- 66 A Flower Piece.
- 67 Mrs. S. D. Gilmore: Worsted Buggy Robe.
- 68 Miss Mary A. Gibbons: Pattern for Chenille Slippers.
- 69 Mrs. Col. James White: Velvet Devotion Cushion.
- 70 Dr. Culvert: Case manufactured Teeth.
- 71 Samuel Brown: Model of Steamer Kearsarge.

—Miss O'Toole:

- 72 Our Universe, pencil drawing.
- 73 The Planetary System, pencil drawing.

—Mrs. W. H. Davenport:

- 74 Crochet Worsted Tidy.
- 75 Crochet Cotton Tidy.
- 76 Crochet Cotton Tidy.

—Mrs. R. C. Alden:

- 77 Knit Scarf.
- 78 Crochet Opera Cloak.
- 79 Braided Child's Dress.
- 80 Braided Child's Dress.
- 81 Braided Child's Dress.
- 82 Crochet Worsted Cape.
- 83 Crochet Worsted Cape.
- 84 Crochet Worsted Jacket.
- 85 Crochet Worsted Jacket.
- 86 Braided Apron.
- 87 Pair Baby's Shoes.

- 88 Mrs. Capt. Henry Butler: One Victorine and Cuffs, made of turkey's feathers.

- 89 Mrs. A. M. Harding: One Knit and Crochet Bed Quilt.

—S. Miller: Specimens of Pen Drawing.

- 90 The Indian Queen.

- 91 The Rose.

- 92 The Eagle and Lion.

- 93 Position of the Hand and Pen.

- 94 The Arabian Horse.

- 95 The Eagle.

- 96 Miss M. Barron: Rustic Frame and Photograph.

—Mrs. Samuel Williams:

- 97 Sofa Pillow, device, American flag.

- 98 Ottoman Cover, worsted work.

- 99 Chair Bottom, worsted work.

- 100 Chair Back, worsted work.

—Mrs. S. Von Ronn:
 102 Crochet Bed Quilo.
 103 Kuit Tidy.
 104 Crochet Tidy.
 105 C. Brower: Pencil Portrait of Abraham Lincoln.
 —Miss E. McKie: Oil Paintings.
 106 Shipwreck.
 107 Sunset Scene.
 —W. A. White: Specimens of Pen Drawing.
 108 Position of the Hand and Pen.
 109 Ornamental Writing.
 110 Portrait of W. H. Tripp.
 —H. C. Macy: Architectural Drawings
 111 Design for Public House.
 112 Toland Medical College.
 113 Toland Medical College, photograph.
 114 Mr. Huff and Dr. Baldwin's Residence.
 115 Dyer, Badger & Rokohl: Piano Forte and Cover
 116 Mrs. Harlow S. Love: Embroidered Cape.
 117 Mrs. Haley: Embroidered Worsted Picture in Frame.
 —Mrs. M. Doane, San Francisco:
 118 Scene on Loch Lomond, oil painting.
 119 Scene on the Cordilleras, oil painting.
 120 Autumnal Scene, oil painting.
 121 Castle Scene, oil painting.
 122 Sofa Pillow.
 123 Dr. M. L. Libbey: One case Anatomical Specimens.
 124 Mrs. E. M. Cottrell: One hand-made Carpet, worsted work.
 —Miss S. J. Casebolt:
 125 Crochet Tidy.
 126 Crochet Tidy.
 127 Crochet Tidy.
 128 Mrs. W. O. Andrews: Rug made of Rags.
 129 Mrs. E. Denney: One case Tattin.
 —Master S. G. Higgins, aged 16 years.
 130 Locomotive "San Mateo," in water colors.
 131 Locomotive "Tiger," in water colors.
 132 Locomotive "President," in water colors.
 133 Mrs. Frank Eastman: Sea Weed Bouquet.
 134 Miss M. A. Norton: Oil painting; scene, Lake Skene atelar.
 135 Dr. J. P. Crowell: One case Dental Goods.
 136 Francis Guth; One case Wood Carving, done with penknife.
 137 James A. Kerr: Water-color drawing, San Pablo, near Oakland.
 138 F. S. Butler: Specimen of Penmanship.
 139 Mrs. H. C. Wilkin: Toilet Spread, stitched by hand.
 141 L. S. Ely: Saddle Cloth, made in Mexico.
 142 S. C. Bugbee & Son: Oil painting, Fruit Piece.
 —E. G. Scott:
 143 Pencil drawing, Robert Burns.
 144 Pencil drawing, Venus.
 145 Jones, Wool & Sutherland: Looking Glass.
 146 Mrs. Wm. G. Barrett: one pair Embroidered Suspenders.
 —Snow & Co., Pictures in Frames:
 147 Wedding Eve.
 148 The Derby Day.
 149 Immortality.
 150 Faith.
 151 The Mountebank.
 152 Sunlight and Shadow.
 153 Storm in the Highlands.
 154 East Pallanza.
 155 West Pallanza.
 156 Carved Pioneer Frame.
 157 Paul and Virginia.
 158 Black Brunswicker.
 159 Three Gold Ovals.
 160 The Gamekeeper's House.
 161 Dolyden Bridge.
 162 Sportsmen.
 163 The Rabbit Fanciers.
 164 Cows in Meadow.
 165 Three Gold Ovals.
 167 Three Gold Ovals.
 —Addis & Koch:
 168 India Ink, Rev. Wyatt.
 169 Colored Photograph, Miss Turner.
 170 Large Ivorytype, Mrs. Whitney.
 171 Colored Photograph, three children, Bonisell.
 172 Large Ivorytype, Gen. Ochoa.
 173 Colored Photograph, Wm. Lyon.
 174 India Ink, Judge Field.
 175 Plain Photograph, Mrs. Chambers.
 176 Plain Photograph, Capt. Eldridge.
 177 Plain Photograph, a lady.
 178 Ivorytype, Miss Little.
 179 Ivorytype, Miss Coates.
 180 Ivorytypes, six in one frame.
 181 Ivorytype, half plate.
 182 Three Frames, cartes de visites.
 183 Ivorytype, Mr. Raymond.
 184 Ivorytype, Mr. Smith.
 185 Ivorytype, Capt. Ray.
 186 Ivorytype, half plate.
 187 Plain Photograph, Low.
 188 Colored Photograph, Miss Mallach.
 189 Colored Photograph, Hubbard.
 190 Colored Photograph, Mrs. Chenery.
 191 Colored Photograph, R. Chenery.
 192 Colored Photograph, Master Morgan.
 193 Plain Photograph, Mrs. Olmstead.
 194 Plain Photograph, Capt. Bradbury.
 195 Plain Photograph, Miss Hawkins.
 196 Colored Photograph, H. A. Snyder.
 197 Colored Photograph, little girl.
 198 Colored Photograph, Mrs. A. A. Snyder.
 199 Plain Photograph, Capt. Lapidge.
 200 Plain Photograph, Judge Field.
 201 Plain Photograph, Mr. Grey.
 202 George Pfaff: three Flutes; two Pioilos, in case.
 203 Samuel Kellett: Ornamental Plastering.
 204 Mrs. Judge Pratt: Wreath of Pressed Flowers.
 205 Maurice Berg: Opera and Masquerade Armor.
 206 Mrs. Heppie May: Crochet Tidy.
 207 Mrs. Hurlbut: Baby Blanket.
 —H. C. Macy, Oakland, Architectural Drawings:
 208 A. C. Deitz's Residence.
 209 Magnifying Glass.
 210 Dr. H. H. Thrall: Case Dental Work.
 —Mrs. G. Casebolt:
 211 One Embroidered Night Dress.
 212 One Embroidered Night Dress.
 213 One Embroidered Night Dress.
 —Miss Georgie Cofran:
 214 Oil Painting, California Scenery.
 215 Oil Painting, California Scenery.
 216 L. Sealy: Oil Painting, the Marriage Gift.
 —R. Winter, Colored Photographs:
 217 Miss Minnie, in Water Colors.
 218 Negro and Boy, Havana scene, Ivorytype.
 219 Miss Cornelius Higgins, water colors.
 220 Mr. Delan, Jr., water colors.
 221 The Worrell Sisters, water colors.
 222 Miss F. Brown, water colors.
 223 G. W. Dam.
 224 Miss Howe, water colors.
 225 Kilpatrick, of Philadelphia, water colors.
 226 Squarza, water colors.
 227 Miss Dora Shew, miniature style.
 228 Miss Emma Winter, miniature style.
 229 Miss Clemens, in oil.
 230 Miss Sophie Edwin, water colors.
 231 C. Winter, in oil.
 232 Master R. Winter, water colors.
 233 Pierce Edouart, water colors.
 234 Wm. Winter, water colors.
 235 Miss Walters, in oil.
 236 Miss Holahan, water colors.
 —C. Morrell:
 237 Banjo, California make.
 238 Banjo, California make.
 —Union College, Water Colored Pictures:
 239 Connemara.
 240 Portrait of a Lady.

242 Portrait of a Lady.
 243 Melrose Abbey.
 244 Study of Landscape.
 245 Sea View near San Francisco.
 246 Entrance to Golden Gate.
 247 Italian Scene.
 248 Study of Landscape.
 249 Study of Figure.
 250 Knowles & Clark: of Case Dental Specimens.
 —Currier & Winter, Pictures and Frames:
 251 Childhood.
 252 Youth.
 253 Manhood.
 254 Old Age.
 255 Ville Eamphile.
 256 Ville de Este.
 257 L. Vesuve rue de Castellemare.
 258 Am Vierwaldstädter See.
 259 Happy as a Queen.
 260 The Coquette.
 261 Fairy Tales.
 262 The Gourmandiser.
 263 Overtasked.
 264 Ull's Water (Cromo Lithograph).
 265 Wetterhom (Cromo Lithograph).
 266 Teynault in the Highlands.
 267 Ramsgate.
 268 Brighton.
 269 Grandfather's Pipe:
 270 Blowing Bubbles.
 271 Wreath of Sea Weed and Shells.
 272 The Challenge.
 273 The Sanctuary.
 274 Samples of Carte de Visite Frames.
 275 276 277 Jacob Zech: three Pianos.
 278 L. R. Meyer & Co.: Marble Statuary, child in prayer.
 279 Mrs. M. Miller, aged 65 years: Patch Quilt.
 280 S. C. Higgins: one American Flag.
 —Miss Emma Bayer, age 15 years:
 281 Pencil Drawing, Group of Dogs.
 282 Pencil Drawing, Hunting Scene.
 —Mrs. M. D. Willis:
 283 Fancy Crochet Sofa Pillow.
 284 Fancy Worked Quilt.
 285 Henry Truman: Drawing of Birds and Insects, in frame.
 —Bayley & Cramer, Photographs:
 286 Col. A. J. Jackson.
 287 Mr. Bowman.
 288 Plain Photograph.
 289 Frank Mayo.
 290 Miss Kent.
 291 Mr. Booth.
 292 Col. Stevenson.
 293 Copy from Daguerrotype.
 294 Miss Earle.
 295 Gen. U. S. Grant.
 296 Abraham Lincoln.
 297 to 302 Plain Photographs.
 303 Water Colored Photograph.
 304 Colored Carte de Visite.
 305 to 314 Opalotypes, new style miniatures.
 315 to 320 Frames of Cartes de Visite.
 320 Mrs. Matilda Clements: Embroidered Child's Dress.
 321 Mrs. Matilda Clements: Embroidered Child's Dress.
 —Jones, Wool & Sutherland:
 322 Large Mirror Frame.
 323 Large Oval Picture Frame.
 324 Small Oval Picture Frame.
 325 Medium size Oval Picture Frame.
 —Badger & Lindenberger:
 326 Chickering & Sons' Grand Piano.
 327 Chickering & Sons' Grand Piano.
 —Eugland & Turnbull, Architects:
 328 Drawing, design for Club House.
 329 Drawing, design for University.
 330 Drawing, 4-story Building, showing elevation.
 331 Drawing of Trinity Church.
 332 Golden State Iron Works: One Piano Plate—Iron.
 333 Mrs. Judge Pratt: One picture of Feather Flowers, natural colors. Entered for competition.
 334 Mrs. M. A. Greenwood: one Child's Embroidered

—A. Brown, Pictures in Frames:
 335 The Mission, in water colors.
 336 Toll Gate, at Lone Mountain, water colors.
 337 Panama.
 338 Monumental Engine Company: Photograph of George Hossefross.
 339 John L. Durkee: Fireman's Hat, in glass case.
 340 Joseph Roos: One Picture in Rural Frame.
 341 A. F. Mitchell: One Gold Watch, in glass case.
 342 O Kaltschmidt: India Ink Drawing, Shakspeare.
 343 John Roach: Miner's Compass and Transit Instrument.
 344 345 Hiram Arents: Two woolen Parlor Mats, made by the patients of the State Insane Asylum, Cal.
 —Jacob Zech:
 345 Improved Piano Sounding Board.
 347 Piano Key Board.
 348 to 350 Three Ornamental Piano Desks.
 351 Piano Key Board.
 —H. B. Platt, Plaster Statues, (imported):
 352 Union Refugees.
 353 The Village Schoolmaster.
 354 The Returned Volunteer.
 355 The Dying Gladiator, in marble.
 356 Union Refugees.
 357 The Picket Guard.
 358 The Wounded Scout.
 359 The Slave Auction.
 360 The Picket Guard.
 361 The Picket Guard.
 362 The Slave Auction.
 363 The Sharp Shooters.
 —Industrial Academy:
 364 Architectural Drawing.
 365 Architectural Drawing of Synagogue, cor. Geary and Mason Streets.
 366 Two Crayon Drawings.
 367 W. O'Donnell: Plan of Portsmouth Square, in water colors.
 368 S. C. Higgins, aged 16 years: Grecian Painting in oil.
 369 to 374 Lawrence & Houseworth: Six Stereoscopes and Views.
 —E. F. Lorquin, Stuffed Specimens, Birds and Animals:
 375 Group of Birds.
 376 Case of Butterflies.
 377 California Weasel.
 378 Artificial Peacock.
 379 California Wood Duck.
 380 Humming Bird and Nest.
 381 Lemur, from Central America.
 382 Group of Birds.
 383 California Quail.
 384 Butter-ball Duck.
 385 California Sea Gull.
 386 Samples of Shells for Shell Work.
 387 California Godwitt.
 388 Group of Birds.
 389 Wedding Wreath.
 390 Skeleton of California Godwitt.
 391 John Chinaman, with load of Wood.
 392 California Aroat.
 393 American Eagle.
 394 Artificial Bird of Paradise.
 —Daniel Winter:
 395 Glass Sign, Embossed and Gilded.
 396 Glass Sign, Embossed and Gilded.
 —Mrs. Ygnais G. Albares:
 497 to 402 Lot Shell Flowers, natural colors, picked up on the Coast of California; lot of Berries from Mexico.
 403 Mrs. M. Tolle: Embroidered Silk Bed Quilt.
 —Miss Margaret A. J. Smith:
 404 Lord's Prayer, executed with a pen.
 405 Position of the Hand and Pen, executed with a pen.
 406 Mrs. Adele Blaser, Newton, El Dorado co., one Crochet Collar.
 —Wasserman & Co., Oil Paintings:
 407 Fancy Portrait.
 408 Winter Scene.
 409 Market Wagon resting at Noon.

411 Moonlight on Pannel.
 412 Antique Castle.
 413 Horses and Groom.
 414 Castle Moonlight.
 415 Landscape.
 416 Landscape, Morning.
 417 Rural Scenery.
 418 Scene in the Country.
 419 Waterfall.
 420 Moonlight, on pannel.
 421 Landscape with Figure and Cattle.
 422 Moonlight.
 423 Marine Landscape, Fishing Boats.
 424 Landscape.
 425 Summer Landscape.
 426 Interior of a German Country Inn.
 427 Landscape, Night.
 428 Landscape, Morning.
 429 Landscape, Houses and Figures.
 430 Dutch Scene on the Canal.
 431 B. C. Turnbull: Portrait, executed with a pen.
 —Mrs. A. B. Bates:
 432 Silk Quilt, containing 3,975 pieces.
 433 Netted Table Cover.
 434 Henry Pfaff: Crochet Mat.
 435 Esther Morris: Embroidered Picture, finding of Moses.
 —S. H. Williams & Son:
 436 Photograph, Residence of T. H. Selby, Redwood City.
 437 Architectural Drawing, Newhall's Auction House.
 438 Photograph, Residence of G. H. Howard.
 439 Maggie Guerin: Large Needle-work Picture, in frame.
 —James Elkington:
 440 Case Stuffed Birds.
 441 Case Stuffed Birds.
 442 One Stuffed Bird.
 443 Case Stuffed Birds.
 444 Case Stuffed Birds.
 445 S. C. Higgins: Drawing of Locomotive, in oil colors.
 —Henry Klein:
 446 Inlaid Writing Desk.
 447 Inlaid Work Box.
 —A. B. Bates:
 448 Mandarin's Sword. One Stalactite.
 449 Japanese Sword.
 —Mrs. Ygnais G. Albares:
 450 Worked Skirt.
 451 Mexican Cup.
 452 Abbalino Lawrence: Case Bead Work.
 453 Dr. E. Belle: Case Anatomical Specimens.
 —Miss Cornelius M. Dell:
 454 Needle-work Picture, Scene in Life of Christ.
 455 One piece Embroidery.
 456 One piece Worsted Work.
 —Mrs. D. R. Coleman:
 457 Shell Work, in case frame.
 458 Quaker and Quakeress.
 459 Crochet Worked Tidy, on canvas.
 460 Power & Warren: Five pieces Wood Carving.
 461 John Daniel: Marble Mantel.
 462 Miss Ada Meacham: Afghan, crochet and embroidered
 463 S. Deitch: Child's Turkish Quilt.
 464 A. J. Doolittle: Official Map of Humboldt county, Cal
 —Mrs. J. B. Harmstead:
 465 Wax Basket and Fruit.
 466 Wax Vase, Flowers and Wreath.
 467 S H Williams & Son: Architectural Drawing.
 —Miss Fannie Gray:
 468 Embroidered Piano Cover.
 469 470 Two American Flags.
 471 Shell Frame containing picture, T. Starr King.
 472 Shell Frame containing picture, "In Memoriam."
 473 Shell Frame.
 474 Shell Frame.
 —Oscar Kaltschmidt:
 475 Lake George, painted in oil colors.
 476 Lake Geneva, in oil colors.
 477 Fancy Sketch, in oil colors.
 478 Portrait of a Lady, oil painting.
 479 G. M. Wood: Stencil Plates, in frame.
 480 Mrs. J. B. Harmstead: Glass case of Wax Shells.
 481 C. Brower: Lead Pencil Drawing of Gen. Wright
 —George Reuben:
 482 Samples Porcelain Fruit.
 483 Portrait in Oil, very old.
 —Palmer Cox, Crayon Drawings:
 484 Marmion.
 485 A Little Girl, copied from a Carte de Visite.
 486 A Portrait, taken from Carte de Visite.
 487 Miss McAllen: Crochet Mat.
 488 to 493 Geo. Hogle: Samples of Soapstone Picture
 Frames.
 494 Master J. F. Clark: Pencil Drawing.
 495 Mrs. J. R. Duerden: Patch-work Quilt.
 —D. Warren Smith:
 496 Major-General Burnside, engraving.
 497 Major-General P. H. Sheridan, engraving.
 498 Andrew Johnson, engraving.
 499 Lieutenant General Grant, engraving.
 500 Abraham Lincoln, engraving.
 501 General Wm. T. Sherman, engraving.
 502 503 Mrs. Geo. M. Wood: Samples of Spanish Needle
 work.
 —C. E. Watkins, Photographs:
 504 to 525 Yo Semite and California Views.
 —Lazarus Castagino:
 526 Inlaid Table.
 527 Oval Frame.
 528 Portrait of Garibaldi, in oil.
 529 Loomis & Swift: In Memoriam, a specimen litho-
 graphic design and workmanship.
 —J. H. Van Reed: Curiosities from Japan, viz:
 530 Bronze Incense Urn.
 531 Turtle, cut out of pure Crystal.
 532 Carved Frog.
 533 Crockery Vase (satsuma ware.)
 534 Crockery Vase.
 535 Bowl (satsuma ware.)
 536 Flower Vase (satsuma ware.)
 537 Bronze Teapot.
 538 Pair of bronze inlaid Stirups, from Shimonoseki.
 539 Explosive 13-inch Shell, taken from the forts of Shi-
 monoseki.
 540 Lacquered Waiter.
 541 Japanese Coat of Mail.
 542 Japanese Armor.
 543 Iron and chain-plate Armor.
 544 Cable, made of human hair.
 545 Fireman's Hat and Embroidered Cape.
 546 One Sword, very rare Blade, 300 years old.
 547 One Sword, very rare blade.
 548 One Spear, rare blade.
 549 Three Swords, rare blades.
 550 Two Japanese Images.
 551 Nine rare Bronzes.
 552 Fifteen very old Coins.
 553 One Crockery Image.
 554 Crockery Japanese Bull.
 555 Japanese Toy Dog.
 556 Two Skeins Japanese Raw Silk.
 557 Piece of Gold Embroidery on Velvet (very old).
 558 Japanese Painting on Gilt Paper.
 559 Japanese Paintings of Entomology.
 560 Thirty Japanese Photographic Views.
 561 Sea House, view taken by a Japanese.
 562 Twelve Japanese Paintings, by Wrigman, correspond-
 ent London Illustrated News.
 563 Mrs. Hurlbut: one Embroidered Sofa Pillow.
 564 565 Mrs. Sarah F. Cofran: Two Velvet Pin Cushions.
 566 to 576 Jas. E. Wolf: Eleven Architectural Drawings.
 577 Thomas Cubbins: Manuscript Memorandum Book of
 the New Orleans Expedition, War of 1812.
 578 Mrs. B. F. Moulton: One Gent's Pen-wiper.
 579 Mrs. J. B. Harmstead: One oval case Wax Flowers.
 —John Widman:
 580 Manzanita Pipe, with stem made of horn.
 581 Pipe Stem, made of ox horn.
 —F. A. Butman: Oil Paintings.
 582 Sunset on the Upper Sacramento.

FIFTH INDUSTRIAL EXHIBITION

583 Mountain Scene, Lake Tahoe.

584 River Scene, Yosemite Valley.

585 River Scene, Yosemite Valley.

586 River Scene, Yosemite Valley.

587 Scene near Santa Cruz.

588 View on Lake Tahoe.

589 Miss Mattie Love: Case of Wax Flowers.

—S. C. Higgins, aged 16 years:

590 Greek Oil Painting of Abraham Lincoln.

591 Greek Oil Painting, child rescued by Newfoundland dog.

592 Melvin Simmons: Model of U. S. Ship Hartford.

593 I. C. Pray: Platypus, native of Australia.

—Mrs. Amy Culver:

594 Patched Bed Quilt.

595 Patched Bed Quilt.

—J. J. Gardiner, Oakland:

596 Pencil Drawing, by a miss 13 years old.

597 Pencil Drawing, by a miss 15 years old.

598 Penciling, of rare merit, from an engraving.

599 Mrs. Ellen A. Darden: Rug made of Rags.

600 Miss Mary Gray: Specimen of Needle-work.

—C. M. Van Reed:

601 Two Japanese Crystal Balls.

602 Three Silver Medals, presented to Japanese Embassy by the United States.

603 Four Bronze Medals, presented to the Japanese Embassy by the United States.

604 Japanese Petrified Toad.

605 Two Japanese Pipes.

606 Japanese Chop Sticks.

607 Five Pieces Japanese Paper Money.

608 Japanese Crystal Vase.

—Nahl Bros. & Co.:

609 to 629 One Oil Painting; three Retouched Photographs; four Photographs, in water colors; eight Plain Photographs; five Pictures on Porcelain.

630 Claus Wilburn: Wooden Watch Chain, made with pen-knife.

631 to 633 F. M. Trueworthy: Three Specimens of Stencil Plates.

634 R. L. Tabor: Book of outlines of Leaves, Grasses and Flowers.

635 to 649 D. H. Wood: Five Oil Paintings and ten Photographs.

650 Mrs. Clara W. Chapman: Piece of Worsted Embroidery.

651 Cameron, Kuenzi & Mills: one Album Stereoscope.

652 Mrs. C. E. Hendricks: Case of Embroidery and Stamps.

653 Mrs. Tolle: Glass covered Table containing Needle-Work.

—E. M. Van Reed:

654 Japanese Silver Coin.

655 Two Japanese Gold Coins.

656 Miss Bertha Keller: Worsted Mat.

657 Chas. A. Gridley: one Bomb Lance.

—G. H. Baker, Samples of Lithography and Engraving;

658 Diploma.

659 Carte Encampment, I. O. O. F.

660 Birds' Eye View of Sacramento.

661 Mining Certificates.

662 Mining Certificates.

663 Nevada Sanitary Commission Certificate.

664 Ladies' Christian Commission Certificate.

665 Alameda R. R. Bond.

666 Freeport R. R. Bond.

667 Pioneer Stage passing Lake Tahoe.

668 Likeness of E. Kendall.

669 Fair Pavilion.

670 J. E. Thayer: Model of Schooner.

671 M. R. Landeslager: Case Gold Pens.

672 Mrs. W. H. Lawrence: Agricultural Wreath in shell frame.

673 to 699 Jacob Shew: Twenty-seven frames of Photographs and Cartes de Visite. [Neglected to furnish list, as requested.]

700 to 704 Wm. Anderfuren, aged 14 years: five Drawings, in water colors.

—Miss E. V. Green:

705 One Case Wax Flowers.

706 Case of Wax Statuary.

707 Case of Wax Statuary.

708 Mrs. Margaret Curtis: Mathematical Models for cutting Ladies and Childrens' clothing.

709 Mrs. Mary Mathews: Case of Dolls illustrating Mrs. Curtis' system of cutting Ladies Clothing.

710 C. W. Boynton: Drawing of Stationary Engine.

—Mrs. Charles Beideman:

711 Samples Needle-Work for Skirt Trimmings.

712 Plated Skirt.

—L. Klain, Photographic Views:

713 View at Lone Mountain.

714 Mr. Rolton's Residence.

715 Front Street Block.

716 Photographic View.

717 Eureka Engine House.

718 View at Lone Mountain.

719 View at Oakland.

720 Residence of Col. Blackwood.

721 Residence of J. Davis.

722 View at Lone Mountain.

723 View at Oakland.

724 A Grave at Lone Mountain.

725 Litchfield's fat Ox.

726 Presidio.

727 Langley's Drug Store.

728 Residence of E. Davis.

729 Deitz's house, Oakland.

730 Residence of Mr. Shepard, Oakland.

731 J. Laidley's Laundry.

732 Bay View Park Hotel.

733 Residence of Mr. Hoar, Geary street.

734 Residence of C. Low.

735 Residence of T. Day.

736 Hough & Baldwin's Residence.

737 Telegraph Hill.

738 Residence G. P. Swift, Sonoma.

739 House on Rincon Hill.

740 House on Howard Street.

741 Lone Mountain Views.

742 Thos. Day's House.

743 Pacific Female College, Oakland.

744 Capt. Macondray's Grave, Lone Mountain.

745 D. Rice's House.

746 South Park.

747 Graves at Lone Mountain: Toland's Medical College; House cor. First and Harrison streets.

748 Tomb of Jos. S. Garwood.

749 Mrs. C. Lobree: Table Cover.

750 Mrs. Mary A. Engle: Worsted Wreath.

751 L. Klain: Photo. Views of Post Office; Orphan Asylum; Peter's Bonded Warehouse; Grave at Lone Mountain, and five Residences.

—R. Winter:

752 Interior of St. Madelina, Paris.

753 Departure of the Israelites from Egypt.

—P. Mezzara, 421 Jackson street:

754 Bust of C. E. Lott in Plaster.

755 Bust of E. Randolph in Plaster.

756 Bust of P. Torquet in Plaster.

757 Bust of D. C. Broderick in Plaster.

758 Bust of J. C. Baldwin in Plaster.

759 Glass Case of Cameo Pins.

760 J. H. Rossiter: Photograph of Dog "Cæsar."

761 Mrs. Louisa McGinnis: Samples of Fluting.

762 Miss M. J. King: Embroidered Pin Cushion.

763 W. H. Davenport: One Crochet Tidy.

764 Mrs. P. U. Blunt: One Maple Sugar Bowl, over one hundred years old.

765 C. L. Houghton: Crayon Drawing, "Over the River."

766 Mrs. E. McGinnis: Ornamental Pin Cushion.

767 Mrs. Mark Anthony: Fancy Skirt, stitched by hand.

768 769 Chas. Hobbs: Two Oil Paintings, painted by Thos. Hill.

770 Lazarus Castagino: Inlaid Picture of Garibaldi.

771 Miss Ida V. Doyle: Specimen of Chenille Embroidery.

772 D. Mojica: one Guitar.

773 James A. Kerr: Water Color Drawing, scene in Russia.
 774 G. W. French: Chain and Wooden Pincers.
 775 Mrs. H. N. Fullam: Last Council of War, in Shell Frame.
 776 Mrs. H. N. Fullam: Shell Frame.
 777 Mrs. Clara W. Chapman: piece Chenille Embroidery.
 —Mrs. Read:
 778 One Ladies Waist.
 779 One Case Skirt Supporters.
 780 J. E. Wolf: Architectural Drawing.
 —Bradley & Rulofson, Photographs:
 781 Gen. Sutter, the Hero of the Bear Flag.
 782 Hon. Schuyler Colfax.
 783 Stevens A. Field, member Supreme Court, U. S.
 784 J. Donohue.
 785 Mr. Blackwood.
 786 Rev. Mr. Goodwin.
 787 Rev. Horatio Stebbins.
 788 Mr. Butterworth.
 789 Ex-Governor Stanford.
 790 Mr. Hardenbergh.
 791 Mrs. Hardenbergh.
 792 James Gamble.
 793 Flood Shockly.
 794 Whaling Captains, Shenandoah Victims.
 795 Mr. Williams.
 796 Gen. Vallejo.
 797 A Young Man.
 798 Harry Williams.
 799 Mr. Belden.
 800 Portrait of a Lady.
 801 Portrait of a Lady, in water colors.
 802 Portrait of a Lady, in water colors.
 803 Portrait of a Lady, in India ink.
 804 Dr. Davis.
 805 Mr. Diekenson.
 806 Mrs. Dr. Ten Broeck.
 809 Hunting Scene.
 810 Boating Scene, "Blow your own Horn."
 811 Mr. Houseworth's Child.
 812 Portrait of a Lady, in water colors.
 813 Chas. Legay, water colors.
 814 Portrait of a Lady, water colors.
 815 Family Group.
 816 Portrait of a Lady, water colors.
 817 Portrait of a Child, in India ink.
 818 Child at Prayer, water colors.
 819 Portrait of a Child, water color.
 820 Portrait of a Lady, water color.
 821 Col. Wood and Staff.
 822 Charles Low, water colors.
 823 to 825 Portraits of Ladies, in water colors.
 826 Bradley & Rulofson's Gallery.
 827 Hon. Schuyler Colfax and Party.
 828 Group of Young Ladies.
 829 Kaisabro, Japanese Prince.
 830 Colored Cartes de Visite.
 831 Colored Cartes de Visite.
 832 Cartes de Visite of Children and Yosemite Views.
 833 to 837 Cartes de Visites.
 —William Shew, Photographs:
 842 Rev. Dr. Bellows.
 843 Gen. Sutter, the Old Pioneer.
 844 Mr. Swett.
 845 Hon. John Conness, U. S. Senator.
 846 D. C. Broderick.
 847 Thos. Starr King.
 848 Rev. Horatio Stebbins.
 849 Hon. Schuyler Colfax.
 850 Miss Dora Shew.
 851 Miss Swett.
 852 Col. James.
 853 Mr. Bowles.
 854 Rev. Dr. Lacy.
 855 Mr. Sargent.
 856 Miss Stephens.
 857 Miss Stephens.
 858 Mrs. Armes.
 859 Miss Maggie Fallon.
 860 Gen. Sumner.
 861 Sig. Sbriglia.
 862 Mr. Backus.
 863 Mrs. Backus.
 864 Gen. Grant.
 865 Signorina Scrovilla.

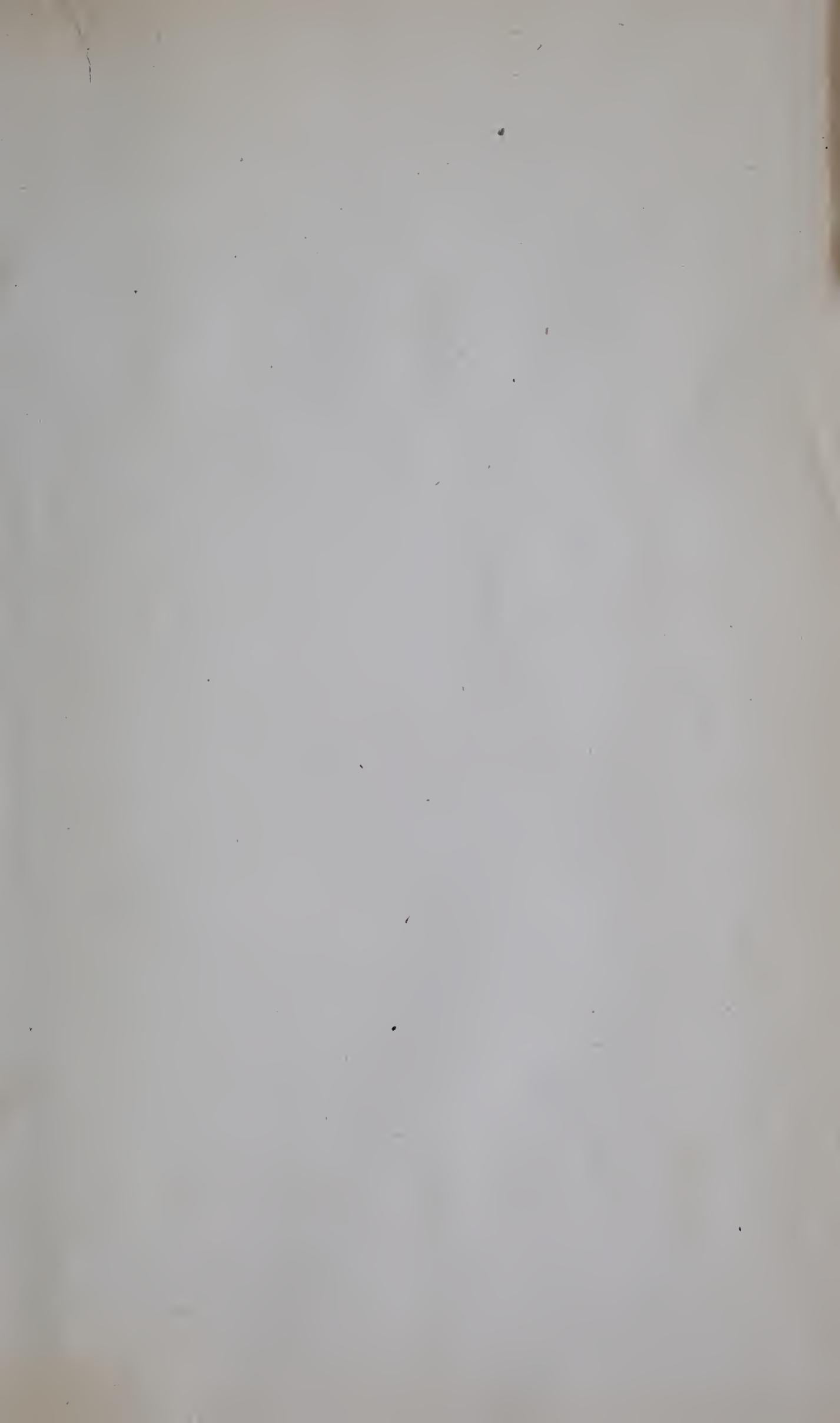
866 to 895 Frames of Cartes de Visite and Photographs.
 —Mrs. J. A. Whipple:
 896 One Piece of Embroidery.
 897 Pair of Embroidered Slippers.
 898 Cameron, Kuenzie & Mills: Glass case of Album Stereoscopes.
 899 John N. Glass: One Frame, made of California jewels
 —Fortunato Arriola: Oil Painting.
 900 Portrait of Mrs. Redo, taken from a photograph.
 901 Portrait of Mrs. H. P. Janes, from a carte de visite.
 902 Mr. Ralston, from a photograph.
 903 Miss Emma Hall, from life.
 904 Mrs. Wade's Deceased Child.
 905 Mrs. Baeon.
 906 F. Arriola, painted by himself.
 907 Miss Ida Owens.
 908 Mr. Hall, from a carte de visite.
 909 Miss Gage: One Case Patterns for Ladies' and Children's Clothing.
 910 Cameron & Kuenzi: Specimens of Scroll Sawing.
 911 Mrs. N. G. Kittle: Embroidered Chemise.
 912 Mrs. N. G. Kittle: Embroidered Pillow Slip.
 913 to 915 John Stratman: Cartes de Visite, Cups and Saucers.
 916 John Stratman: Masonic Picture, colors made to represent pearl.
 917 Mrs. Judge Pratt: Representation of Crucifixion, made of Oregon Mosses.
 918 Capt. Henry Tucker: Engraving of Gen. Washington, the only article of Furniture saved from the Ship Sophia Thornton, when destroyed by the Shenandoah.
 919 Thos. Selby & Co.: View of Shot Tower, cor. of Howard and First street.
 920 Louis Schuch: Case of Meerschaum Pipes and Meerschaum Ambers.
 921 Mrs. Emily P. Bailer: Worked Skirt.
 922 Mrs. Emily P. Bailer: Worked Skirt.
 —Charles F. Jones, Chinese Curiosities collected during the Rebellion in 1863, 1864, 1865, viz.:
 923 Bamboo taken from the Palace at Ye Sing,
 924 Shoes of one of the Wives of the Tze Wong, at the City of Le Yang,
 925 Ancient China Cup,
 926 Small Chinese Josh, 200 years old,
 927 Musical Instrument,
 928 Chinese Seals,
 929 Flint, Tinder and Steel,
 930 Tongue Cleaner,
 931 Eagle, carved from the root of a Tree,
 932 Chinese Coarse and Fine Comb.
 933 Chinese Knife,
 934 Chinese Precious Stones and Curiosities,
 935 Taiping Woman and Shoe,
 936 Foot Warming Pan,
 937 Mandarin Stamps,
 938 Chinese Shoe-lift,
 939 Silver Chain,
 940 Jaeket of the Waungs,
 941 Chinese Curtain Holders,
 942 Bottom of Ladies Trousers,
 943 Taiping's Head Dress,
 944 Gold Medals, presented to Mr. C. F. Jones, by the Emperor of the Taipings,
 945 Piece of the Covering of the Throne at the Palace where the Emperor was Murdered,
 946 Jade Stone, a precious stone of China,
 947 Silver Baubles, captured at the battle of Tsing Poo,
 948 Rice Stone,
 949 Silver Bauble, taken at Fre-si-que Grand Canal,
 950 Jade Stone Buckle,
 951 Model of Chinese Boats,
 952 Opium Pills,
 953 Chinese Needles,
 954 Sewing Silk,
 955 A very Ancient Dish,
 956 A very old Josh,
 957 Pair of Eye Glasses,
 958 Aromatic Fan, from Calcutta,
 959 Fan from Bombay,
 960 Box of Needles,
 961 Two Trays, taken from Chung Wong's Palace,
 962 Carved Foot-board of Bedstead, taken from the Palace of Mowong,
 963 Two Eggs, made of Alabaster,
 964 Paper weight, made from Elephant's Tooth,
 965 Signal of Marriage, with high Mandarin and Lady,
 966 Opium Pipe,
 967 Bracelets,
 968 Coins of China and India.

970 Chinese Imperial Mandarin,
 971 Taiping, or Rebel Chief,
 972 Pure Gold Taiping Pass,
 973 Pipe, taken at the fall of Tsing Poo,
 974 Lot of Curiosities, taken at the battle of Mordn,
 975 Show Case of Coins and Curiosities from all parts of
 China.
 Twelve Pictures from eelebrated Palaees in the Cities of
 Le Yang, and Foo-Chow-Foo.
 976 Mrs. Henry Bradt, Red Bluff: Portrait of John Brown,
 painted from a photograph in possession of his widow;
 said to be the best likeness extant.
 977 Mrs. Matilda Clements: One Embroidered Child's
 Sacque.
 978 Capt. Edgar Wakeman: One Mahogany Sea Chest.
 979 Miss Gage: One Wax Statue.
 980 Mr. S. C. Higgings: One Fruit Pieee.
 981 Industrial Drawing Academy: One Pencil Drawing.
 982 Master H. T. Barrett: One Toilet Cushion.
 983 C. F. Richards: Colored Mosses and Pearl-shell in
 frame.
 984 G. F. W. Riehter: Seven Dved Hen's Eggs, engraved
 with the point of a pen-knife.

ADDITIONAL.

Mrs. Mary A Fairchild: One Patch-work Quilt.
 Mrs. A. Barrett, One Rug.
 " " One Hull Frame.

Charles F. Boshen: One Shell, with Lord's Prayer in min-
 ature.
 Chas. H. Fisher: Two Arehitectural Plans.
 " " Three Puzzles.
 " " Two Tackles, with weights.
 Dr. E. Belle: Dental Apparatus.
 Ripley & Kimball: Two Pianos.
 " " Three Melodeons.
 Miss M. J. Keating: One Embroidered Pin Cushion.
 Wheeler & Wilson: Four Oil Paintings.
 J. W. Whittaker: Linen Handkerchief one hundred years
 old.
 J. A. Bauer: Three India Ink Drawings.
 Mrs. Flora S. Godfrey: Antique Chair and Faney Tidy.
 Wheeler Martin: Three Paintings.
 Miss Carrie Baldwin: Embroidered Sofa Cushion.
 Mis. R. Velasco: Three Embroidered Handkerchiefs to imi-
 tate engravings.
 W. A. Howard: Pebble Table.
 W. B. Frisbie: Piano.
 Mrs. Blake: Piece of Embroidery
 C. Shultte: Three Cork Pictures.
 Z. Wood: Three Architectural Drawings.
 W. B. Ewer: One Picture of Washington.



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